Butter Tests of Jersey Cows.

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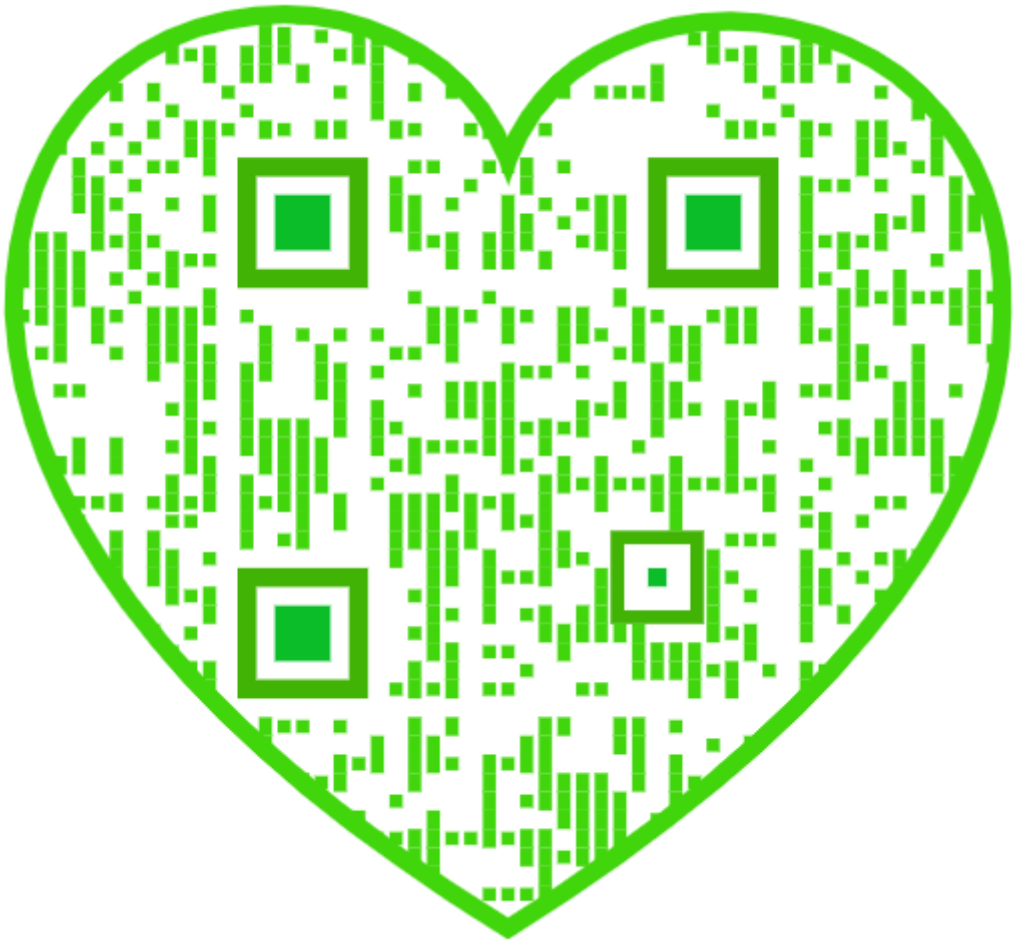

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15384 P

BUTTER TESTS OF JERSEYS;

BEING

A COLLECTION OF TESTS

OF

REGISTERED JERSEY COWS,

WHEREIN THE YIELD HAS AMOUNTED TO FOURTEEN POUNDS OR MORE PER WEEK.

Brought Down to the First of January, 1884.

TO WHICH ARE ADDED

TABLES OF SIRES AND DAMS

OF FOURTEEN-POUND COWS,

AND

THREE ESSAYS ON SUBJECTS CONNECTED WITH THE BREEDING AND TESTING OF JERSEY CATTLE.

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COMPILED AND PUBLISHED BY

CAMPBELL BROWN, THOS. H. MALONE, WM. J. WEBSTER AND M. M. GARDNER.

VOL. I.

15384 01

CHICAGO:
BREEDER'S GAZETTE PRINT.
1884.

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Campbell Brown, Thos. H. Malone, Wm. J. Webster and M. M. Gardner.

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PREFACE.

This book includes all tests of registered Jersey cows, which were made before January 1, 1884, in the United States or Canada, and have been properly reported to us by the owners or other persons making or superintending the tests, *where the actual yield for seven consecutive days was fourteen pounds or more.* Intended originally as a mere continuation and enlargement of a list published in the *Country Gentleman* of February 23, 1882, it has grown to its present dimensions by force of circumstances.

The lists of 1882 included some tests reported to have been made on the island of Jersey, and a number of others for periods less than a week. But an association has recently been formed on the island to superintend and publish tests, so that we decide to omit the island tests. As the tests under seven days are of all lengths from one to six days, it did not seem to us that the labor of collecting and classifying them would be repaid by corresponding usefulness on their part. The seven-day test is quite short enough and is generally accepted as the standard of comparison.

We have required the signature of the owner at the time of the test, or of the person who actually made it, to be published with the test, as the only satisfactory evidence of its accuracy that we are in a position to offer. We have not presumed that a person of good character will certify to a statement which he does not know to be correct, and if the person so certifying is of indifferent or doubtful reputation, the publication of his name ought to be the best way of bringing that fact to light. We have adhered to this rule, even to the extent of rejecting several tests strongly supported by other evidence, and probably correct, but lacking the certificate of the person making or superintending. Two reports by a man whom the club has discredited by rejecting his entries have also been thrown out.

When we came to revise the list of 1882 and incorporate it with the new one, some errors were detected, and it was found that the original evidence in the case of a few tests, then satisfactorily certified to us, had been lost or mislaid. These tests, four or five in number, consequently appear in this book without the names of the persons making them.

No effort has been spared to have our lists as complete as possible. We advertised in the leading stock journals, sent circulars to all members of the American Jersey Cattle Club, and mailed applications for information to every person that we could hear of as at any time the owner of a cow for which a test was claimed. This part of our work was extremely laborious, and we have to acknowledge our obligations for valuable assistance in it to Mr. J. H. Walker, of Worcester, Mass., and Mr. J. L. Shallcross, of Louisville, Ky., who kindly permitted us to have copies of extensive lists which they had compiled for their private use; also to the officers of the Club for information furnished from the office of the secretary. The whole number of reported tests investigated by us was about twelve hundred, and as many of the cows had passed through the hands of a half dozen owners, ten or fifteen letters frequently had to be written about one animal.

Some of the tested cows had very long pedigrees, going back ten or twelve generations, and to print them in full would have delayed the publication of this book and added seriously to its cost. A little examination showed that all that was valuable or instructive in a pedigree was almost invariably indicated in the first three crosses, or could be added in a brief foot-note. We decided therefore to tabulate the pedigrees only to the first three crosses, showing every animal which gave as much as twelve and a half per cent of its blood to the tested cow.

Where a cow has a seven-day test and also a longer test, she stands in our tables on her week's test. This is the case with Jersey Belle, of Scituate and Eurotas. In a number of cases, tests longer than a week, and indicating excellent capacity, are reported for cows which have no seven-day tests. These are thrown together in the table marked No. II.

Table III gives all bulls which have sired three or more cows in Tables I and II; Table IV, all cows which have produced two or more

daughters in the same tables. An important addition to the table of bulls is the number of their registered daughters, classified by ages. Some inaccuracies may possibly be found in this list, as its compilation involved searching the first thirteen volumes of the register, animal by animal, for the get of each of the twenty-three sires.

From the very large number of cases in which the feed was reported, we have selected as many as seemed necessary in order to give an idea of the average practice of breeders, or to illustrate the methods adopted by those who have been successful in testing. A few wholly exceptional and extraordinary cases are also noted; the reader will easily distinguish these.

Of course in a work dealing so largely with detached and independent facts and figures, some errors are likely to have crept in, but we hope they will not be found frequent or serious. We shall be under obligations to any persons who may detect mistakes, if they will point them out to us for correction.

NOTE.

When we decided to prepare short commentaries upon the facts in this volume, the work, after due consultation, was divided between us, and each has selected his own topics for discussion, without, however, being at all confined to them.

We have written without attempting to harmonize our opinions on any of the subjects mentioned, believing that whatever differences of opinion really exist, should be freely expressed.

Mr. Gardner, being much occupied in business, has declined to write.

The reader will please distinguish sharply between the facts given in the body of our book, which have been canvassed and examined by us all, and the individual opinions expressed in this introduction.

INTRODUCTORY ESSAY.

BY CAMPBELL BROWN.

It is but three or four years since a few breeders of Jersey cattle became satisfied that the only way to ascertain the dairy value of their animals was to test them separately for butter. For a long time after the first introduction of Jerseys into America the English idea concerning them prevailed and prevented their becoming popular or generally valued. That idea is best expressed in the following quotation from "Youatt on Cattle": "They are found mainly in gentlemen's parks and pleasure grounds, and they maintain their occupancy there partly on account of the richness of their milk, and the great quantity of butter which it yields, but more from the diminutive size of the animals. Their real ugliness is passed over on these accounts, and it is thought fashionable that the view from the breakfast or drawing room of the house should present an Alderney or two grazing at a little distance."

Among the first writers to controvert this preposterous estimate of the Jersey, and to call attention to her real practical value was Col. Geo. E. Waring. His letters to the *American Agriculturist* and his able essay prefixed to Vol. I of the *Herd Register* may justly be said to have laid the foundations of their present popularity. The first volume of the *Herd Register* appeared in 1870, but it was ten years before the tests of Jersey Belle, of Scituate and Eurotas, reported by that adroit and eloquent writer, Hark Comstock, drew attention to the necessity of testing singly every cow in a herd as the only sure method of ascertaining her value.

Even now, although every breeder recognizes the direct pecuniary value of a butter test, and cattle are sold less upon fancy points or appearance than on actual butter production, testing is by no means so general as it should be, or is bound to become during the next few years. The breeder who neglects to test his cattle will find them neglected by the public, no matter how fashionable their pedigrees or how good their looks may be. Even when Mr. W. J. Webster and I began,

in 1881, to compile the list which I published in 1882, although supported by the majority of breeders, our work was disapproved by a large and conservative minority, who failed to comprehend the necessity of showing to the public that the breed was unrivaled in the particular province of butter production. Some of these gentlemen stood out very obstinately against progress in this direction, but one by one they have fallen into line, until now there seems more danger that the value of butter tests will be overestimated and their significance exaggerated, than there is of any want of appreciation of them.

The tables which we have prepared will enable our readers to make their own comparisons of different families and strains of cattle, and to draw their own conclusions. I do not propose to discuss them at length, but it may not be improper to direct attention to a few of the points that have appeared to me legitimate and necessary deductions from them.

1. LEADING FAMILIES.

I see in them no ground for the idea that any one family is entitled to pre-eminence. There can be no question that some families are better than others, and it may be that during the next six or eight years enough progress will have been made in testing to enable us to say, with some degree of confidence, that ten or twelve families or tribes stand out from the mass as of superior excellence. But the figures now give no ground for claiming in behalf of one, two or three strains any decided superiority. The truth seems to be that in those families where most tests have been made, most good cows have been discovered, and just as the trotting-horse is recognized as the production of the American trainer, quite as much as of the American breeder, so the prominence of certain families of Jerseys is due as much to those who have tested and developed them as to any inherent merit on their part. This view is supported by the fact that we rarely receive a single report of a test from any breeder — they usually come in twos and threes — showing that when one cow proved good, the discovery of other good ones immediately followed. I know one herd which eighteen months ago contained no cow that had tested fourteen pounds. It now has eight, and none of them added by purchase.

Moreover, as soon as a wonderful test is reported in any family, the owners of cows of the same blood immediately begin testing them, and the result is that a number of tests to the credit of that blood are reported in a short time.

It seems likely indeed that the general excellence of the breed is still underestimated, and that with the spread of the habit of testing we shall be treated to a succession of surprises in the way of newly

discovered prodigies, while we shall acquire a higher and more accurate opinion of the true value of the Jersey cow.

It is stated on good authority that during the year 1883 one hundred and ninety new performers entered the list of 2.30 trotters. Of these forty-one per cent were by Rysdyk's Hambletonian, his sons and grandsons, fifty-nine per cent of all other families combined. Of the latter, twenty per cent additional are more or less closely related to Hambletonian. There can be no dispute therefore as to the fact that his blood occupies the first rank among trotters. With the Jerseys it is totally different. Out of about five hundred tested cows, mentioned in this book, no one bull, his sons and grandsons, can claim as many as six per cent, and no single sire has more than two per cent to his credit. There are, in Table III, twenty-three sires, each with three or more cows in Table I, but all these twenty-three sires combined have not as many as thirty per cent of the whole number. Suppose, instead of considering the whole number of fourteen-pound cows, we take a few of the very highest weekly tests. The highest of all is that of Princess 2d, whose yield of 27lb. 10oz., under official supervision, was made since our lists closed, but ought to be considered in this connection. She was by Khedive, P. S. 103, out of Princess, F. S. 452, Khedive by Leo F. S. 198, out of Coomassie. The pedigree of Princess is not traced, and for my present purpose it is unnecessary to extend that of Princess 2d further. If then we take the six highest tests, they are as follows:

Princess 2d	27.10
Mary Anne of St. Lambert's	27.09¼
Nancy Lee	26.08½
Jersey Belle of Scituate	25.03
Value 2d	25.02¼½
Hazen's Bess	24.11

It would be hard to find six cows more entirely strangers in blood to each other than these. If the reader will compare their pedigrees as given in this volume, I believe he will find absolutely no indication of relationship between any two of them.

If we take all the cows above twenty pounds, the result will be somewhat less striking, as there are several families which would have more than one representative; but it will not be less decisively in support of the proposition that no family or families can claim the first places with any fair prospect of continuing to hold them.

If it be objected that the seven-day tests are not as full and accurate indications of merit as those for a month or a year, I grant that this is probably true, but we have not enough monthly and yearly tests to form any fair basis of comparison. Not more than ten or a

dozen of each are reported and of the five best yearly tests of registered cows, only two—those of Eurotas and Mary Anne—appear to have been conducted with the intention of finding out all that the cows could do. The others were made in the ordinary course of dairying. It will be time enough to begin to compare yearly tests when we have fifty or sixty on hand. But it is worth remarking that the best month's test is accredited to Princess 2d, that also has the best week's test, and Mary Anne, second best for a week and for a month, is first for a year. This looks as if the short tests indicated pretty fairly what the long ones would be.

2. FORCE AND VALUE OF BUTTER TESTS.

I have intimated that there was now more danger of exaggerating than of underestimating the value of butter tests. It would have been safer to add "as at present conducted." He who will carefully examine the tests, nearly five hundred in number, reported in this volume, will find that they were made under such an infinite variety of circumstances, as to age of the cattle, feed given, season of the year, climate, pasture, mode of working and salting the butter, its quality, its condition when weighed, etc., that it seems hardly fair to compare any two of them together as equally good indications of the actual capacity of the cows. These variations, of course, can never be quite gotten rid of, and many of them are apparent rather than real. For instance, a cow of eleven or twelve years old may be as much past her prime as a cow of three or four is usually short of it, and full summer pasture, before flies are troublesome, may be a pretty fair equivalent for full winter feed, while a thermometer below zero may not interfere more with butter yield than a moderate swarm of gnats, a worrying dog, or an ill-tempered milkman.

To regard tests made under such widely diverse conditions, as accurately indicating the relative value of individuals, would be to give them an importance they hardly deserve. To use them as approximately correct guides to the selection of a herd is rational and proper: and as *absolute proof* of the practical value of Jerseys for the butter dairy, and as showing for that purpose an excellence unrivaled in any other breed, the value of the evidence afforded by them cannot be overestimated by Jersey breeders.

A few of the weak points of butter tests, as at present conducted, may be briefly mentioned. Most of those reported, while differing from each other in many respects, agree in one important feature, that they do not exceed the bounds of what may fairly be considered ordinary dairy treatment. But some, and among them some of the largest and most notable — some supervised by appointees of Jersey

breeders' associations — are reported as made under such extraordinary conditions as to food and treatment as could not be used in a dairy, nor followed with profit by anyone for any length of time. What I mean when I say ordinary dairy treatment, is such treatment as practical dairymen have, at various seasons and in different places, found profitable for themselves and safe for their cattle. To milk and feed twice daily is the ordinary dairy practice, to milk and feed three times is still within the limits of legitimate dairying, and is practiced by a few; but no dairyman feeds his cow five, six or seven times daily with six or eight different kinds of food, wakes her at 3 or 4 A.M. to milk, milks at noon, and again at 9 or 10 P.M., or puts her to bed with a posset of oatmeal gruel. What a cow can do with such pampering and stimulating treatment is undoubtedly a question of some interest, and what she accomplishes may be regarded as an extraordinary feat of internal gymnastics, but it is certainly no fair or accurate sign of her actual dairy capacity, nor does this mode of testing afford a fair standard of comparison with other cattle. We are fortunate in having a conspicuous instance of both modes of testing, in the case of a cow of perhaps unrivaled constitution; and her owner, my personal friend, I think will pardon me for saying that the yield of Mary Anne, of St. Lambert's, when she made in seven days twenty-four pounds and thirteen ounces of butter, on five quarts of grain twice a day, and pasture, ought to be regarded as a much more certain and probably a higher indication of working capacity than her twenty-seven pounds, nine and a quarter ounces, made with thirty quarts of grain daily, at five feeds. I name her as the only animal that I remember to have been tested upon both plans. Her owner's report of her largest yield, if I do not misinterpret it, seems to show that he regarded it rather as an interesting proof of her immense constitution than as a performance more meritorious than the best that preceded it.

The question whether tests should be reported in salted or unsalted butter is one deserving brief discussion. My own experience is, that unsalted butter is a very uncertain quantity, and whether it will gain or lose by salting depends largely upon how it has been worked before the salt is put in. One morning last summer two or three friends met at my dairy. While there the question was raised whether butter gained or lost by salting. The cream of the herd was placed in two churns and churned simultaneously. Butter came first in the smaller churn, coarse-grained and yellow, and was washed in several waters, worked dry in a Reid butter worker, and weighed. It was then salted, the salt being weighed in, one ounce to the pound, was reworked and reweighed. It was a strictly gilt-edged article, and was immediately packed for shipment. Here are the weights:

Unsalted, well washed dry butter	17.06
Salted and reworked	17.03
Loss in ounces	3

Particular attention is asked to the other churning. The butter came too soft, but of excellent color, and was treated precisely like the other sample, except that it was too soft to be passed through the butter worker, and the salt was worked in, and the water and brine apparently thoroughly worked out by hand.

Unsalted, well washed soft butter	28.03½
Salted and reworked	29.04½
Apparent gain	1.01

This sample was too soft for packing or making into rolls, but to a casual observer it would seem about as dry as the other, and to need only cooling in order to be marketable. But my dairywoman at once pronounced it full of moisture, and insisted that it be put aside and reworked the next day. I therefore took charge of it, and next morning it was reworked and weighed again, making only 26.08½ of strictly marketable butter.

Here we have an apparent gain in the first instance of seventeen ounces, but a final loss from original unsalted weight of twenty-seven ounces, and from extreme salted weight, while soft, of forty-four ounces — nearly one ounce and one and a half ounces to the pound respectively. This is a rather extreme case.

Subsequent experiments led me to the following conclusions:

1. That if the butter is worked unwashed, or is washed in clear water, it will lose by salting, and the loss will average from one-half ounce to one ounce to the pound.

2. That if it is washed in a brine of moderate strength, it will gain by salting — seldom, however, as much as one-half ounce to the pound.

3. That if washed in a very strong brine, it will gain about the weight of the added salt, but will contain quite too much salt to be a first-class table butter.

4. That if the butter is worked, washed and salted in the usual manner, then set aside for twelve or twenty-four hours and reworked, it will be fair to compare it with any other sample that has been similarly treated. On several occasions I weighed ten pounds of butter apparently ready for market, kept it twenty-four hours, reworked and reweighed it. The loss in one instance was as much as four ounces. This was in very cold weather at midwinter. There would probably be less loss during spring and summer, as the salt would strike through the butter more rapidly.

3. EXTERNAL SIGNS OF BUTTER CAPACITY.

Some of these appear purely fanciful and have never gained much currency. Such is the "upper fount"—a curl of hair on the spine, back of the withers, considered by the few believers in it to be the more valuable indication, the further back it is found toward the hips. One gentleman relies on "the fatty protuberances under the end of the lower jaw"; another attaches great importance to the dandruff in the end of the tail; another to the length of the tail, and so on.

But there are others of these external signs which are more or less generally relied upon, and which it is worth our while to consider more in detail. First of these is the *escutcheon.*

In the new and accurate translation by Mr. Hand, of Guénon, on Milch Cows, I find this broad statement:

"The form or pattern of the escutcheon indicates the class to which the animal belongs, while the extent of surface covered by it denotes the milk-giving capacity. This extent, varying in a decreasing proportion, gives rise to several orders, in which I range the members of each class. The fineness of the hair of the escutcheon, and the color of its skin, indicates the quality and quantity of the milk.

"In all the classes and orders the escutcheon is the sole indicator of the internal capacity of the udder, so that if the escutcheon is large, we can pronounce, without hesitation, that the internal reservoir is large, and the yield of milk will be abundant; while if the escutcheon be small, the reservoir is small, and the yield of milk will be small. Hence those cows which have large escutcheons, composed of fine hair, are the best milkers, especially if the skin, from the inner joining of the thighs to the vulva, is of a yellowish color, and if on scratching it with the nail we can detach little scales of a fatty substance. Those animals in which this latter characteristic is found in the skin of the switch and of the inside of the ear, yield a milk very rich in butter, whatever be the quantity, and whatever be the class or order to which they belong."

For several years after I began breeding Jersey cattle, I was a firm adherent of this system, never dreaming that there could be any question of the correctness of statements so positively and dogmatically set forth. I worked hard to familiarize myself with the system, read with avidity everything that was published concerning it, and was rather dismayed than pleased when I found that it could not be adjusted to the facts which forced themselves upon my notice. It is not, therefore, from inattention or prejudice, that I am forced to express my disbelief in the Guénon theory, as at present expounded by its advocates. Like all other purely empirical systems, it probably rests upon some foundation of truth, but until considerable progress has been made in perfecting it, the breeder, who trusts it as a guide, is likely to do so to his own pecuniary loss. If the escutcheons of a hundred or two of the best tested butter cows in the country

could be accurately photographed and measurements made of them, we should have a starting point from which to begin an intelligent investigation of the theory. In the absence of such data, I give from several sources descriptions of the escutcheons of a few noted cows, which fail to fit in with the Guénon theory.

First of these is Mercedes, the great Holstein cow that won the *Breeder's Gazette* Champion Cup for best thirty days' yield of butter, in 1882. Prof. J. W. Sanborn, dean of the Missouri Agricultural College, saw her at the St. Louis fair last fall, and here is what he says :

"In the different breeds, I attempted to study the marks of a good cow, and especially the escutcheon. Each breed seemed to have a type of escutcheon peculiar to itself. Mercedes surely might be expected to carry a good escutcheon and milk veins. She certainly was not extra strong in either of these respects, not strong at all in the escutcheon. My day's work did not settle a conviction regarding the escutcheon."

Col. M. C. Weld has just been to see Mary Anne, of St. Lambert's, and winds up an excellent account of her appearance with these words : "Escutcheon, selvage of medium breadth."

Last year, in company with several other breeders, I made a visit to Darlington, and carefully examined the great cows there. My notes were made on the spot and submitted to one of my companions as we returned to New York in the train, for his corrections. I believe they are fairly accurate, and make these extracts :

"Eurotas — Escutcheon good on thighs with very peculiar downward running streak, like an immense oval, except that it is connnected at the top with the hair of body. This is plainer on the right side than on the left. Escutcheon does *not* 'go out like a spread-eagle on thighs,' as has been said, but is only a good thigh escutcheon, by no means phenomenal."

"Bomba — Escutcheon a good curve-line ; no tufts, curls nor ovals."

"Neither of these escutcheons was at all unusually good, nor was Jersey Queen of Barnet's any better."

About a year ago I had a visit from a friend who was a firm believer in the escutcheon, and after discussing it for awhile I proposed that we go out and examine a few tested cows. Our examination was made in the following manner : One carried Guénon's book, the other Hazard's. Each looked at a cow separately, and put down what he considered her escutcheon to be, without knowing how the other rated it. We then compared notes, and found but one or two discrepancies, which we reconciled. We examined some twenty cows, but I mention only the two which had given over twenty pounds, viz : Croton Maid, then here to be bred, and Duchess of Bloomfield. Of these the first had a bicorn escutcheon of the second

class, and the second a nondescript escutcheon, more like a bicorn of the third class than anything else, but not agreeing with any of Guénon's classes.

Here are six cows, of which four would fairly be ranked as phenomenal, and the other two strictly first-class, yet not a first-class escutcheon among them. If I be told that the examiners were incompetent judges, I reply that a system which a man of barely ordinary intelligence cannot master in seven years — for I was seven years trying to learn it — is not likely to prove valuable to the average farmer, and needs revision and simplifying.

Other marks relied on are: *yellow hide and ear; yellow horn; oily yellow dandruff at end of tail; large milk veins.*

I examined Eurotas at the end of April. It must be remembered that her year's test is one of the richest ever made. It has been stated that her butter was of inferior quality, but Mr. Carpenter assured me that this was an error, and it was fully up to the average of the herd. It was not so yellow as Jersey Belle's, which was peculiarly golden, but it was good in color and texture.

Now, in April 1882, Eurotas had a palish hide, a pale udder, a *very* pale ear, and the dandruff in her tail was dry and dark, not golden or waxy.

Bomba had a chalky horn, heavier than that of Eurotas (though the latter had lost both shells), black tipped, a pale hide, which seemed a little thicker than Eurotas', but equally mellow, a pale udder and pale ear.

Jersey Queen of Barnet had rather better colored hide and ear, but her udder was of a chalky white.

Next day I saw Coomassie and her grand family, including Ona. Their hides and udders were also pale, and while the Island scale of points allows one for length of tail, which is supposed in some mysterious way to be connected with milking capacity, a short tail is characteristic of the Coomassie family.

The color of hide, ear and udder is so largely influenced by the season of the year, the food and other considerations (I have heard that a sea-voyage always made the hide white), that it will not do to attribute too much importance to it; while a golden-yellow skin is undoubtedly very attractive, and, I believe, usually indicates yellow butter. It has not with me turned out to be always a sign of rich milk, and in one case a cow of very yellow skin gave me paler butter than the average of the herd.

As to milk veins, young cows are apt to have small ones, and old cows large ones. I have never got beyond this: a good cow is pretty certain to have good milk veins when she is matured.

HOW TO BREED THE BUTTER COW.

If we may not trust ourselves confidently to the guidance of external marks in the selection of our cows, but must depend alone on the churn and the scales, we are much in the position of the breeders of thoroughbred horses, whose favorite maxim is: "Breed to the winner."

In doing this, there are a few well-established principles that should be borne constantly in mind, and there are one or two popular superstitions of which we shall do well to rid ourselves.

When the problems of breeding first began to be discussed, the great rule was formulated that "like produces like." With this confession of faith the English breeders of racehorses and improved cattle long remained satisfied. Afterward it was discovered that in many instances "like did *not* produce like," and that the progeny varied in ways most puzzling and disappointing from the characteristics of their parents. The principles of atavism and reversion were then gradually recognized, and to the original axiom, "like produces like," was added the saving clause, "or the likeness of some ancestor." Broadly interpreted and liberally or metaphorically read, this statement may be accepted as fairly truthful. Literally construed, it would be most misleading. The child is not the mere repetition of the type contained in one parent, nor can it be a collocation of the qualities of both parents, unchanged and uncompounded. Opposite or hostile characteristics may so combine as to obliterate or, more correctly, to neutralize each other, thus setting free to act certain other elements which in the parents lay nearly dormant or overshadowed by stronger traits, and creating in the child a character which at first sight seems quite unlike what we should have expected. Moreover, two or three children of the same parents, inheriting of course the same blood and the same tendencies, may, and usually do, by the different manner in which those tendencies combine, differ greatly from each other as well as from their parents.

There is a very common idea that gifts or faculties are more likely to overleap one generation and reappear in the next than to follow the direct line of descent. We often hear it said that a great man's grandsons are more likely to inherit his genius than his sons, and the same is expected to prove true of the lower animals. On this erroneous opinion are based several incorrect theories of breeding. It is well, therefore, to quote the words of a writer, whose authority in such matters is of the highest. Francis Galton, in his work on Hereditary Genius, at page 60, speaking of the relationships of the great judges of England, says:

"Another fact to be observed is the nearness of the relationships in my list; also, though a man has twice as many grandfathers as fathers, and probably

twice as many grandsons as sons, yet the judges are found more frequently to have eminent fathers than grandfathers, and eminent sons than grandsons. In the third degree of relationship the eminent kinsmen are yet more rare, although the number of individuals in those degrees is increased in a duplicate proportion. When a judge has no more than one eminent relation, that relation is nearly always to be found in the first or second degree."

And on page 83, referring to certain tables which he has compiled, he states the law of heredity :

"Table III shows in the most unmistakable manner the enormous odds that a near kinsman has over one that is remote, in the chance of inheriting ability. Speaking roughly, the percentages are quartered at each successive remove, whether by descent or collaterally. Thus in the first degree of kinship the percentage is about 28; in the second, about 7; and in the third, 1¾."

To apply this law to the case before us, it follows that we cannot dispense with individual excellence in sire and dam, hoping to find the want of it supplied by inheritance from more remote ancestors, and that the top crosses in a pedigree are many times the most significant and valuable. After getting back beyond four or five generations, the more remote ancestors seem to have very little influence that needs consideration. If I were to attempt to describe an ideal Jersey pedigree, it would be one where every cow to the fourth generation had made twenty pounds of butter in a week, and every bull to the same degree had been the full brother or the son of one such cow and the sire of another. And I would rather give up this requirement for all the sixteen great-great-grandparents than for either sire or dam.

BREEDING IN AND IN.

This method, also called with more exactness incestuous breeding, is a great favorite with many theorists and has been practiced with some strains of Jerseys to a notable extent. I propose to discuss it under two heads :

1. Is incestuous breeding ever advisable?
2. Is it advisable in Jersey cattle as we have them today.

It is well here to make a distinction of vital importance. That system of inbreeding which consists in reuniting, at some distance from the parent stock, several scattered lines of descent from a famous common ancestor has always commended itself to the judgment and fancy of breeders, and has been a valuable factor in the improvement of most varieties of domestic animals. But the continued inbreeding of mother and son, father and daughter, or, worst of all, brother and sister, without any admixture of fresh blood, and carefully avoiding such mixture, is what constitutes in-and-in breeding. There is a

general opinion or impression that such breeding has often improved domestic animals and rarely injured them, while it is generally acknowledged that it has usually proved fatal to the human race.

My reading and observation incline me to doubt whether the benefits derived from the system in the past have not been greatly exaggerated. In discussing the question whether incestuous breeding is ever advisable, I shall illustrate this branch of the subject entirely by references to the history of other breeds of cattle and other varieties of domestic animals, as I have already intimated that there are peculiar features in the origin and history of the Jersey, to separate her case from others.

The advocates of incestuous breeding maintain,

1. That it fixes the type of animal to be perpetuated, or, in other words, *establishes the breed.*

2. That the breed once established, it intensifies the ability to transmit qualities by inheritance, or, to use a phrase now very common, *increases the prepotency* of an animal.

3. That great breeders like Bakewell, Colling and Bates used it successfully and to advantage, in their day, therefore it will be wise for us to imitate them now.

Let us investigate these propositions a little and see how far we can admit their correctness. The history of the foundation of any improved breed of animals, in a country like Great Britain, has been about as follows: Some clear-headed man has appeared, made up his mind what was wanted, selected from all the country round the animals best suited for his purpose, brought them together on his farm and there judiciously crossed them and bred their progeny together, selecting such individuals as most nearly approximated the desired type, and carefully rejecting all inferior or undesirable animals. Used thus, the family soon becomes reduced in numbers, the best specimens are necessarily more and more closely related, and presently incestuous breeding is ventured upon without immediate apparent ill results, *the animals so interbred being the very best of their race.* The careless observer sees the inbreeding, but not the causes which lead to it, or the careful selection which precedes it, and attributes the result to what is a necessary consequence of the scarcity of suitable material and an imperfection, or, at best, a mere accidental feature of the system adopted.

As Bakewell's example is probably more often adduced than that of any other breeder, in behalf of in-and-in breeding, I quote rather freely from the accounts of his methods given by Youatt in his works on sheep and cattle, and by Prof. Low in his "Domesticated Animals of the British Islands." Youatt says:

"It was about the middle of the last century that Mr. Bakewell, of Dishley, in Leicestershire, first applied himself to the improvement of the sheep in that county. Up to this time, very little attention had been given to the breeding of sheep.

"Mr. Bakewell perceived that smaller animals increased in weight more rapidly than those very large ones; and that they consumed so much less food that the same quantity of herbage applied to feeding a larger number of small sheep would produce more meat than when applied to feeding the smaller number of large sheep, which alone it would support. He also perceived that sheep carrying a heavy fleece of wool possessed less propensity to fatten than those which carried one of a more moderate weight. Acting upon these observations, he selected from the different flocks in his neighborhood, without regard to size, the sheep which appeared to him to have the greatest propensity to fatten, and whose shape possessed the peculiarities which he considered would produce the largest proportion of valuable meat and the smallest quantity of bone and offal.

"The sort of sheep, therefore, which Mr. Bakewell selected were those possessed of the most perfect symmetry, with the greatest aptitude to fatten, and rather smaller in size than the sheep then generally bred. Having formed his stock from sheep so selected, he carefully attended to the peculiarities of the individuals from which he bred, and, it appears, did not objecting to breeding from near relations, when, by so doing, he put together animals likely to produce a progeny possessing the characteristics that he wished to obtain."

He adds that the faults of the New Leicesters were delicacy of constitution, want of prolificacy and deficiency of fleece,—all results of in-and-in breeding. Since his day, they are quite supplanted in public favor by other breeds.

Prof. Low's history of Bakewell's methods is almost identical with this. The improvement made by Bakewell in long-horned cattle is described by both authors in nearly the same language, and to quite the same effect as the above. I quote Youatt's account:

"Improvement had hitherto been attempted by selecting females from the native stock of the country and crossing them with males of an alien breed. Mr. Bakewell's good sense led him to imagine that the object might better be accomplished by uniting the superior branches of the same breed than by any mixture of foreign ones.

On this new and judicious principle he started. He purchased two long-horned heifers from Mr. Webster, and he procured a promising long-horn bull from Westmoreland. To these, and their progeny, he confined himself; coupling them as he thought he could best increase or establish some excellent point, or speedily remove a faulty one.

"As his stock increased, he was enabled to avoid the injurious and enervating consequences of breeding *too closely* "in-and-in." The breeding was the same, but he could interpose a remove or two between the members of the same family. He could preserve all the excellencies of the breed without the danger of deterioration; and the rapidity of the improvement which he affected was only equaled by its extent."

Here we have the process skillfully and, in the opinion of this eminent writer, successfully applied. Now for the result. It is again Youatt who speaks. The italics are mine :

"But what has become of Bakewell's improved long-horn breed? A veil of mystery was thrown over most of his proceedings, which not even his friend, Mr. Marshall, was disposed to raise. The principle on which *he seemed to act*, breeding so completely "in-and-in," was a novel, a bold, and a successful one. Some of the cattle to which we have referred were very extraordinary illustrations, not only of the harmlessness, but the manifest advantage of such a system; but he had a large stock on which to work; *and no one knew his occasional deviations from this rule, nor his skillful interpositions of remoter affinities*, when he saw or apprehended danger.

"The truth of the matter is, that the master spirits of that day had no sooner disappeared than the character of this breed began imperceptibly to change. *It had acquired a delicacy of constitution inconsistent with common management and keep; and it began slowly, but undeniably, to deteriorate. Many of them had been bred to that degree of refinement, that the propagation of the species was not always certain.*"

As to the Collings, Youatt distinctly denies them the merit of having materially improved the breed, and says :

"Great credit is due to the Messrs. Colling for the herds they reared and disseminated; and while it is true that in their career they had the best herds then in existence, it is equally true that they never bred better animals than they procured originally, with which to commence breeding.

"The obvious and great merit of the Collings was, that they brought the Short-horns into *general* notice out of a *local reputation*, and made them as well known abroad as they were in the valley of the Tees river; not that they improved on their good originals."

Youatt quotes Mr. Bates as saying in a letter relating to his famous Duchess tribe of cattle.

"I purchased my original cow of this tribe of cattle of the late Charles Colling, Esq., of Ketton; they had been in the possession of Mr. Colling twenty years, who purchased his original cow from Stanwix, and called her Duchess, which Mr. C. Colling repeatedly assured me *was the best he ever had or ever saw*, and that he never was able to improve upon *her*, although put to his best bulls."

Mr. Bates and his successors adopted with the Duchesses the plan pursued by Bakewell with his long-horns, and the disastrous result of his system is now before our eyes. The pure Duchesses are well nigh extinct, and the few that remain are being crossed with other tribes to save them from perishing utterly.

Here then we have the three eminent examples of incestuous breeding — the Leicester sheep, which no longer exist as created by Bakewell, and even as modified since his day, have declined in numbers and popularity — the long-horns, which are extinct, and the Duchess tribe of Short-horns, almost extinct. Let us oppose to them Prof. Low's pleasing picture of the improvement made a hundred years ago

in Southdown sheep by Mr. John Ellman, through a judicious system of crossing. To complete the contrast, we must remember that no breed of sheep is to-day more valuable or more popular than the Southdown.

"Amongst the individuals most distinguished as the improvers of this breed, was the late John Ellman. This gentleman began his important experiments about the year 1780, when he acquired possession of the farm of Glynde, near Lewis, in the county of Sussex. He remained on this farm more than fifty years, during which period he directed his attention, in an especial degree, to the improvement of the native sheep of the Downs. He pursued his system of progressive change with judgment, perseverance and zeal; and he must be regarded as one of the most skillful and successful breeders whom this country has produced. He displayed none of the too narrow selfishness which, it is to be regretted, appeared in the proceedings of his distinguished contemporary Mr. Bakewell. He freely communicated the details of his valuable practice, and showed himself to be entirely exempt from illiberal prejudices. He did not experience the necessity of creating, as it were, a breed, but was contented to adopt the basis which was afforded him in the one already naturalized in the Sussex Downs. He did not carry any of his principles of breeding to an extreme, but acted under the guidance of temperance and judgment. He sought for the properties of health and soundness of constitution, as well as for those of external form and facility of fattening; and therefore he did not, like Bakewell, confine himself rigidly to the blood of his own stock, but resorted to others, that he might infuse first vigor into his flocks, and prevent them from becoming too delicate. His aim, in short, was the really useful; and, though he reaped the due reward of his enterprise and skill, it was never obtained by arts of any kind, by deception or useless ostentation. His character throughout was one of sincerity and manly simplicity; and it is pleasing to add, that he closed a long and honorable life, respected and regretted by all that came under the influence of his social virtues. He died in 1832, having entered into his eightieth year."

The only argument remaining in favor of incestuous breeding is that it intensifies the ability to transmit qualities by inheritance, or creates prepotency.

In the history of what animals do we find this hold good? For two hundred years and more horses have been carefully bred for the turf, and the contests of the racecourse have afforded the severest possible test of the success or failure of any system of propagating them. In all that time I do not recall a single instance of an in-and-in bred horse that attained the first rank as a racer or as a sire.

Not to mention living sires, of which not one can be even called moderately inbred, Lexington, Leamington and Bonnie Scotland were conspicuously impressive and all strongly outcrossed.

If we go to the trotters and take the six most prominent sires, we find one of them, and he as yet the greatest, namely, Rysdyk's Hambletonian, spoken of as "strongly inbred," "remarkably inbred" to Imp. Messenger. In fact, he has three crosses of Messenger and just

twenty-five per cent of his blood! — a degree of inbreeding to which there can hardly be rational objection. All the others — Blue Bull, George Wilkes, Almont, Volunteer, Daniel Lambert — are essentially and strongly outcrossed.

With the general history of Short-horn cattle I am not well enough acquainted to speak of them in detail, but I know enough to assert that for every incestuously bred sire that has proved prepotent *for good*, a worthy rival can be found among outcrossed animals.

The example of the Ptolemys, kings of Egypt, is occasionally quoted as one where in-and-in breeding of the most extreme description was practiced in the human race, yet the family culminated in the famous Cleopatra.

Here is what Galton has to say on the subject, in his work on "Hereditary Genius":

"This race of Ptolemys is at first sight exceedingly interesting, on account of the extraordinary number of their close intermarriages. They were matched in and in like prize cattle; but these near marriages were unprolific, the inheritance mostly passed through other wives. Indicating the Ptolemys by numbers, according to the order of their succession, II married his niece, and afterward his sister; IV his sister; VI and VII were brothers, and they both consecutively married the same sister — VII also subsequently married his niece; VIII married two of his own sisters consecutively; XII and XIII were brothers, and both consecutively married their sister, the famous Cleopatra. Thus there are no less than nine cases of close intermarriages distributed among the thirteen Ptolemys. However, when we put them, as below, into the form of a genealogical tree, we shall clearly see that *the main line of descent was untouched by these intermarriages, except in the two cases of III and of VIII.* The personal beauty and vigor of Cleopatra, the last of the race, cannot therefore be justly quoted in disproof of the evil effects of close breeding. On the contrary, the result of Ptolemic experience was distinctly to show that intermarriages are followed by sterility."

So much for in-and-in breeding in general. Now as to Jersey cattle, we find that for certainly a hundred and fifty years they have been bred upon an island, six miles by eleven — about the size of a moderate western ranch — with absolutely no intermixture of foreign blood, no effort at diversifying the type, no disposition on the part of some to breed for beef, and of others to breed for milk or for the yoke, and no effort to avoid breeding in-and-in. When history first introduces them to us they are already an established breed, and noted for their excellence in the butter dairy, and the type is fixed much as it exists to-day. What reason is there for in-and-in breeding of such cattle? One of the complaints made against them already is their delicacy of form and constitution. That this is largely unfounded, and by judicious breeding for a few years to come will be entirely removed, I have no doubt, but in-and-in breeding would only exag-

gerate the defect. The Jerseys that have come to us from the island are already quite sufficiently inbred, as a rule.

Again, almost all the earlier importations to America were more or less inbred as a matter of necessity. They were scattered over the country in small herds, at such distances from each other that it was quite the exception when a breeder had access to any bull but his own, and as prices were then moderate and there was no demand for bull calves, few were kept, and a bull's daughters were frequently bred back to him or a cow to her own son.

As a consequence of such conditions we should expect to find *all* Jerseys more or less inbred, and my experience is, that wherever we can trace them back five or six crosses, such is certain to be the case; hence it will not do, when a cow makes a good test or a bull proves a good sire, to lay too much stress on what inbreeding we may find. If that inbreeding be to *good individuals*, it is *probably* a valuable element, but some of the most strongly inbred Jerseys I have seen have been some of the most indifferent. I recall one, that was of 75 per cent very noted blood and had neither dairy quality, constitution nor beauty to recommend her.

HINTS ON TESTING COWS.

There is no mystery about testing. The thing is to understand your business of dairying or put the test into the hands of some one who does understand it. Then all becomes simple. But a few suggestions and cautions may be worth giving.

In the first place, do not be in too great a hurry to test. Let your cow be ready before you start. It is well to begin gradually and cautiously "feeding up" for a test as much as ten days before you expect to commence it. Increase the food by degrees to the point you wish to reach, unless the cow shows signs of being surfeited before you attain it, in which case you had as well break off and begin again, making up your mind to test on less feed. When your cow is eating as much as you wish her to have during the test, let her have a few days for the increased ration to take effect. Then begin your test and do not increase or change her feed during the test, unless she is falling below your expectations and you are ready to experiment. I have known several excellent tests broken off by a slight change in feed.

Don't be discouraged too soon. If your cow fails on her first trial, the milk may not have been properly handled, or the cow may have been ever so little out of health or condition. Try her from time to time by churning a day's milk separately, varying her rations also occasionally, till you hit upon the proper management of the milk or the food best suited to the cow. I had once a cow whose milk required

twelve hours more than the average of the herd to ripen for churning, and had to be treated accordingly.

Have a good churn, and see that it is properly handled by whoever manages it. There are many excellent churns, and a few bad ones. As a rule, all those patterns which claim to bring butter in some marvelously short time are hard to manage. You can often tell whether your churn is doing its part well by weighing in the milk or cream several successive days, and seeing whether the yield of butter in proportion to milk is satisfactory and regular. A better way is to have two patterns, and try them together or alternately. I have one churn which does well in winter, but not in summer.

Repeated tests are often necessary to ascertain a cow's capacity. If satisfied with one's breeding and appearance, do not reject her on the evidence of a single test. It may be an off year with her, or she may not have reached her maturity. I know of two bulls, both standing high as successful sires, but the daughters of one are in their prime at four years, while those of the other improve until they are six or seven.

Again, I sold two cows from my herd because I did not believe either would ever reach fourteen pounds. One has given nearly twenty-two pounds in an officially conducted test, and the other eighteen pounds.

Do not wait for your cow to give a large quantity of milk before testing. Many of the best tests have been made when the cows were giving between twenty and thirty pounds of milk daily.

As to the feed during the test, we state the practice of a number of breeders, which our readers can study and compare for themselves. No rule of general application can be laid down, as cows differ endlessly in ability to assimilate food, and in preferences for one kind or another, and their tastes must be consulted, and their peculiarities carefully studied in order to reach the best results.

I have generally found cooked or steamed food rather unsatisfactory, and cut hay slightly moistened preferable to uncut hay. Corn and oats are better ground quite coarse. They are quite as well digested, and the animals eat them more readily than when ground fine. Cornfield peas boiled are occasionally much relished. Wheat bran increases the milk, but unless unusually rich in flour, seems to have little effect on the yield of butter. One sample of bran may have five times as much nutriment in it as another. That made at the large merchant mills, by the new process, is usually about the dearest feed a butter dairyman can buy, so thoroughly is it stripped of all valuable elements. Cotton-seed meal in small quantities I have found useful, especially when there is no grass.

BUTTER TESTS.

BY THOS. H. MALONE.

This book had its origin in the conviction of the compilers that the breeding of Jerseys, considered as butter cows, could never be placed upon a satisfactory basis, nor conducted upon principles giving reason to hope for great and continued improvement in the breed, so long as fancy points, such as color of the hair, skin and horns, length of switch, size of horn, and escutcheon, etc., usurp the place, or share the importance, which in their opinion belong exclusively to actual performance. How far these or other points may enable one to judge in advance what a particular individual may perhaps do, is not to be discussed in this connection; the position now taken is simply that when an individual has actually made a great performance, this is a fact which to the breeder is of more importance than any prognostication can possibly be, upon whatever founded, and which he can disregard only at his peril. The purpose of the compilers was therefore to make and put in convenient form, for the use of breeders, lists of these great performances, with some account of the breeding of the performers.

If these lists could be known to be absolutely correct in every regard their usefulness would be admitted by all. So far as the writer knows the only objection which has been urged against them is that perhaps some of the tests reported are, through fraud, accident or mistake, not true representations of the fact; and so that an individual of little merit may be placed far above her superiors, to the injury of breeders and the breed.

Well, frankly, the compilers do not undertake to say that they believe every test reported is accurate, and, as stated in another connection, they are not responsible except to this extent:—that each test has been certified to them by one or more persons worthy of credit, so far as they knew. After all, each test must stand upon the character of the certifiers, and by showing when the test was made and to whom the animal at the time belonged, we have enabled all to make investigations, each for himself.

But the compilers do believe that the tests reported are as a rule correct. That a Jersey cow is capable of yielding eighteen, twenty, and even twenty-six or twenty-seven pounds of butter in seven days is now too well established to admit of any doubt whatever. The hundreds of reputable gentlemen certifying to the facts cannot all be deceiving or deceived. The capacity of the Jersey is established, so far as human testimony can establish anything. This point conceded, it becomes easy to credit the reports of tests falling far within the admitted capacity.

The question for the breeder, however, is not whether some, or even many, of these reported tests may be errors, or even frauds, but whether, because some may be untrue, we should reject all. It is not pretended by the compilers that the tests which they report were conducted in the best conceivable way to exclude error or fraud; but, despite possible error or fraud, these tests, such as they are, being all that we have, are, in the opinion of the compilers, of priceless value. Besides, they hoped that the fact that in the past the methods pursued have not been the best possible, may itself arouse such an interest as will force the American Jersey Cattle Club to elaborate a system which for the future may give more satisfactory results.

Hitherto, properly speaking, there have been no "official" tests, if we mean by official tests such as are conducted under the auspices and according to the directions of the highest recognized authority. There are so-called official tests, which were conducted by persons *unofficially* appointed by the directors of the American Jersey Cattle Club. But these directors did not pretend to have any authority for their action, nor did they prescribe, or even suggest, the precautions to be taken to guard against fraud or error. Some of these tests seem to have been conducted by the individuals suggested by the directors throughout, and some seem to have been chiefly under the care of appointees of the appointees of the directors. The precautions to guard against error or fraud are, it is believed, not the same in any two cases. These things are mentioned, not as casting any doubt upon the accuracy of any of these so-called official tests, for here the writer can frankly and heartily say, that as to no one of them, in so far as he knows or believes, is there any possible room for doubt, but as showing that we ought not to rest content with the mere shadow of an official system which we have. They are mentioned also to show that these tests, like the others, must depend solely upon the trustworthiness of the men who certify them. There is no test which is vouched for by the American Jersey Cattle Club, or which having the sanctity of a record, cannot be "averred against."

The writer, after much doubt, has become convinced that the Club

should take jurisdiction of this matter, thoroughly digest a system, rigidly enforce the rules that may be adopted, and make the reported results "records." There can be no doubt that the chief great function of the Club is to preserve the purity of the breed by keeping the record of pedigrees accurate and trustworthy. The importance of this function is felt in direct ratio to the strength of the conviction that the Jersey is a breed of a fixed definite type, with a fixed tendency to make large yields of butter, just as the blood horse has a fixed tendency to gallop more rapidly than other breeds of horses. The compilers believe that the evidence afforded by the tables made by them will once for all set this question at rest. They are satisfied that henceforth no one will have the boldness to claim for a few individuals, however eminent, the right to be considered as the only source from which a butter breed may hereafter be evolved. If their work had no other value, this alone, they think, would justify the labor and care given to it. It cannot, as they believe, be overestimated. So long as doubt shall remain on this point, so long will our methods be unscientific and the results more or less unsatisfactory. The methods which should be pursued in fixing a type are, as the writer believes, by no means those which should be followed after the type shall have been fixed. The tables shed a flood of light on this question, as is more fully shown in another part of this preface. But lest he should be misunderstood, it is proper to add, that while the writer holds that all attempts to apply to the breeding of Jerseys seeming analogies, arising from experiments with breeds whose type and tendency are not fixed, are erroneous and misleading, he thinks that among Jerseys, as among blood horses, certain individuals and families have for breeding purposes superior value. But he insists that just as great sires and great racehorses have arisen since Lexington, having none of his blood in their veins, so, after the great cows now justly considered the reigning queens shall have passed away, other great cows will arise alien in blood to them. It is a significant fact that no son of Lexington has been found worthy to succeed to his sire in the stud, although scores of them gallantly maintained his honors on the turf.

Holding these ideas, it is manifest that the writer does not undervalue the great work which the Club has taken upon itself and has hitherto so faithfully performed. As a member of the Club, he would strenuously resist all attempts to make the right of registration in any way dependent upon the tests of the individual or its ancestors. But it is not perceived that by assuming jurisdiction of butter tests the duties of the Club with regard to pedigrees will be in any manner interfered with. And when it is considered that there is no authority except that of the Club, which can prescribe and enforce rules to

secure uniformity, fairness and accuracy with the smallest possible margin for error, that without tests our breeding is but blindly groping in the dark, and that if the Club should decline to take charge of the matter, the great value of tests being now generally recognized, frauds are likely to be multiplied, it is believed that the members of the Club will see that the time has arrived when the Club can no longer leave to individuals what can only be efficiently done by it.

But if the Club should consent to take charge of tests, the best method to be adopted is then to be considered. The question thus presented is far from being free from difficulty.

It is known that the Club has on hand a large and increasing fund at present not needed in the administration of its affairs, and it has been urged by some that this fund should be used to establish and maintain a few permanent stations under the exclusive control of the employés of the Club, and to these stations the owners could, upon the payment of certain fees, and under certain restrictions, send the cows they desired to have tested. The feature which chiefly recommends this plan is, that the cows would be exclusively in the hands of the employés of the Club, whose skill, experience and trustworthiness would in a large measure guarantee that the reports would not only be truthful and accurate, but that the tests would represent fairly the capacity of the cow.

The objections to the plan are as obvious as the advantages, and, it is believed, greatly outweigh them. In the first place, owners of very valuable cows would not willingly send them far away from home and trust them to the care of strangers, which, however conscientiously given, would hardly equal that of the owner; and this aside from the danger and exposure of railroad travel and the subjecting of them to new climatic conditions. But the objection which to the writer seems insuperable is, that in a short while these stations would, or might, become pesthouses, from which disease might be disseminated all over the country. Not many years ago an entire herd of Jerseys, and one of the best in the land, was destroyed by contagious pleuro-pneumonia. An individual from one such infected herd sent to a station would work incalculable damage. Despite all reasonable care, this is a danger to which such stations would be always exposed, — a danger which, it is believed, Jersey breeders will in no wise be willing to incur.

After much reflection it has occurred to the writer that the following plan, or some modification of it retaining its main features, is perhaps, all things considered, the most practicable which has been suggested.

In the first place, the Club should, upon the recommendation of say

seventy-five per cent of the members in any state, appoint as many official testers as may be needed for that state.

For each test made by him the tester should be paid by the Club his traveling expenses to and from the place at which the test is to be made, and a fixed per diem for his services during the time devoted to the test.

These testers should be made removable by the directory of the Club at any time for cause, and without cause on application of three members of the Club residing in the state.

The owner desiring his cow to be tested would make application to the Club, accompanying it with a fee to be fixed by the Club, and which should be large enough to meet the expenses of the test, with a small surplus to provide for publishing in proper form the tests when made.

The owner should under no circumstances be permitted to pay the tester anything, and the reception by the tester of money or any present whatever from the owner of a cow under test should be cause for removal.

The Club should digest rules for the guidance of the tester, and any deviation from these should render the test incapable of being received as a record.

The rules should in detail prescribe the precautions to be taken by the tester to guard against fraud or error. They should prescribe how often and when the cow should be fed and milked. The amount and quality of the feed, however, should be eft to the owner, who also should have the right of managing the milk and churning process, under the supervision of the tester; but it should be the duty of the latter to report in detail the kind and amount of feed, the management of the milk, the temperature at which it was churned, how long it was churned, and perhaps other matters that may suggest themselves.

The Club should prescribe how often the butter should be worked before weighed, and at what intervals, how much salt should be used to the pound, if salted butter is to be weighed, and whether the butter shall be worked after being salted and before weighed.

The testers should be furnished with printed instructions and blanks for the entry of all matters required to be reported.

Tables like those we have prepared, if no better form should suggest itself, should be prepared from these reports, and either placed as appendixes to the volumes of the Herd Book as they come out, or should, if preferred, be published in separate volumes.

The tests should be for seven days, because longer ones would be inconvenient and expensive; and indeed if long continued, the expense would place them beyond the reach of very many, perhaps a majority,

of Jersey breeders. Besides, although there may be not a few exceptions to the rule, yet it may fairly be considered, as a rule, that a seven-days' test will in general show the capacity of the cow.

Whatever may be the objections to this plan, it is at least practicable, and it is hoped that if adopted by the Club, and amended and perfected as experience may suggest, it will give fairly satisfactory results.

BLOOD LINES.

BY WM. J. WEBSTER.

It might now be assumed that it is a well-established fact that the Jersey cow, as a breed, has a fixed tendency to make butter. If this is not so, they have spent a hundred years on the Island in vain breeding the race, and thousands of dollars in America in establishing fine herds to no purpose.

It is our experience that capital has a keen eye to interest, and rarely invests continuously in one line unless supported by merit. But lest we may be accused of begging the question, we furnish a still stronger argument. The system of testing cows is of comparatively recent date, and even now cannot be said to be in general practice, though it is gradually becoming more general (and will, we think, be made the standard for selecting a breeding herd), yet we find about five hundred cows that have well-established butter tests over 14 pounds, and some as high as 27 pounds 10 ounces, all from the same breed of cattle (when the average of the common cow is, we think, about 4 pounds per week), and we find the exceptionally large records supported by official tests. This, then, established, what is the office of the breeder? It seems to us to be that of bringing together the blood of cows of the highest type of the breed, and by a process of selection exaggerate this tendency, and by proper food bring out and stimulate the greatest production of butter in a year.

Just here seems to be the greatest difficulty, and the most intricate problem to solve. We all agree we want it, but how to accomplish it is the question. The natural tendency and the general course of the mind is toward inbreeding. This view may be taken by some because it is novel, and looks scientific; by others, because it is supposed the breed was created in this way. We have no definite information as to how it was created, and do not wish to speculate. If it was created by inbreeding, it seems to us there has been quite enough of it for the last hundred years on the Island.

If by selection and crossing them we may safely continue that line of action, our opinion is, we should select animals from *families of known merit and of the same type not akin*, and unite them. In this

way we will get the tendency exaggerated WITHOUT IMPAIRING THE CONSTITUTION. These families should, of course, be those that have shown power to transmit their good qualities. And, in making this selection, it is well to avail ourselves of anything we find from experiments of others, whether the trial was made from accident or design, and where the coupling of two families has been productive of good results, follow it up. There are also some very prepotent families that couple well with most anything, because they overcome the defects of others and reproduce themselves. These are the most valuable, as they may form the connecting link to unite others that would not "nick" well.

It may freely be admitted that inbreeding exaggerates tendency. I presume it is a fact that cannot be denied. The reason is apparent: two animals of a strong fixed tendency and of the same type, as they are likely to be when of the same blood, bred together, exaggerate tendency, and remould the same type in exaggerated form, but they exaggerate the weaknesses and defects of system and weaken and impair the constitution, and thus impaired it will not be able to stand the drain which the exaggerated tendency demands, and, while they might produce largely for awhile, would probably not, even for a week, hold out at full capacity, and certainly not for a year, and while they might make 14 pounds, it is not probable that many would come in above 18 pounds per week.

We believe that the first requisite of a butter cow is capacity to digest rich food and assimilate it. To do this strong constitution is required, and anything which has a tendency to impair this should be avoided. We are satisfied that the same good results can be attained by selecting animals *not akin of the same type and breeding them together as by inbreeding*, and that though this may be a slower process, it is the surer one.

But it may be asked what you would do with those of different type, and of equal merit individually and from family excellence. We suggest that some animal not too widely different from either be selected as the connecting link, if it be important to unite them.

We don't wish to be understood as combating an occasional judicious use of inbreeding of good animals on inferior ones, in order to overcome defects which exist in one side by increasing the blood of the good side, nor coupling remotely related animals of the same family where there are outcrosses between them, and this we will, for use of a better word to convey our meaning, call line-breeding (and where that word occurs herein it may be understood in this sense), but incestuous inbreeding is what we think wrong. We think inbreeding dangerous, and, if ever practiced, should stop with one cross and go

immediately out. But we might theorize forever without settling a fact. So for the benefit of those whom it may interest we will classify all cows over 18 pounds per week under the formula of breeding to which they belong, and let the facts as ascertained speak for themselves. We may make errors in this, but if we do we can be corrected, and it will at least give something to think about. It seems to us to be divided as follows:

1. Animals outbred or not akin.
2. Those linebred (or from uniting collaterals of the same family with each other).
3. Those *linebred* with an outcross culminating in the animal that made the test.
4. Those inbred.
5. Those inbred with an outcross culminating in the animal tested.

Under Formula 1 we class the following (Princess 2d not in the list, but tested since):

Princess 2d	27	lbs.	10	oz.
Nancy Lee 7618	26	"	8½	"
Hazen's Bess 7329	24	"	11	"
Oonan 1485	22	"	2½	"
Mollie Garfield 12172	22	"	12	"
Tenella 6712	22	"	1½	"
Valma Hoffman 4500	21	"	9	"
Jenny Dodo H. 14448	21			"
Lady Mel 2d 1795	21			
Mary M. Alison 6308	20	"	14	"
Duchess of Bloomfield 3653	20	"	½	"
Meines 3d 7741	20	"		
Oaklands Cora 1885	19	"	9½	"
Reception 8557	19	"	8	"
Bertha Morgan 4710	19	"	6	"
Beauty of Jersey 7850	19	"	2	"
Summerline 8001	19	"	8	"
Alluring 5541	19	"	5	"
Thisbe 2d 2201	19	"	1½	"
Magna 2238	19	"	1	"
Rissa 16014	19	"		
Belmeda 6229	18	"	12	"
Bet Arlington 8970	18	"	11	"
Floribundus 2d 14949	18	"	8	"
Evelyn of Jersey 6789	18	"	6	"
Bonny Yost 7943	18	"	2	"
Roonan 5133	18	"	2	"
May Blossom	18	"	11	"
Patterson's Beauty	18	"		

No. 2. Linebred.

Chrome Skin 7881	20	lbs. 10	oz.
Daisy of St. Peter's 18175	20	" 5½	"
Countess Potoka 7496	18	" 15	"
Lady Gray of Hilltop 6850	18	" 12	"
Belle Grinelle 4037	18	" 8	"
Island Star 11876	18	" 10	"
Melia Ann 5444	18	" ½	"

No. 3. Linebred Outcross.

Mary Anne of St. Lamberts 9770	27	lbs. 9¼	oz.
Value 2d	25	" 2 1/12	"
Landseer's Fancy 2876	21	" 15	"
Ona 7840	20	" 13	"
Mint 2d 3890	19	" 11	"
Nelly 6456	21	"	
Dot of Bear Lake 6170	19	" 4	"
Butter Star 7799	18	" 4½	"
Rosa of Bellevue 6954	18	" 7½	"

No. 4.

Jersey Belle of Scituate 7828	25	lbs. 3	oz.
Chroma 4572	20	" 6	"
Phaedra 2561	19	" 13	"
Rosebud of Allerton 6352	19	" 12	"
Fair Lady 6723	19	"	
Queen of Delaware 17129	18	" 13	"
Hilda D. 6683	18	" 5	"
Volie 19465	18	" 1	"

No. 5.

Maud Lee 2416	23	lbs.	
Eurotas 2454	22	" 7	oz.
Bomba	21	" 11	"

As will be seen, there are twenty-nine outbred cows, seven linebred cows, nine linebred with an outcross, eight inbred and three inbred with an outcross; fifty-six with tests over 18 lbs. This seems to confirm the ideas advanced, especially that the largest of either are to be found in the entirely outbred or the linebred outcrossed list. It might be of interest, and we here add a list of sires and dams of 20-lb. cows.

SIRES OF TWENTY-POUND COWS.

Khedive 103, P. S.	Princess 2d	27 lbs. 10	oz.
Khedive 103, P. S	Ona	20 " 13	"
Stoke Pogis 3d 2238	Mary Ann of St. L	27 " 9¼	"

Victor 3530	Jersey Belle of S	25 lbs.	3 oz.
Hurrah 2814	Value 2d	25 "	2 11/12 "
Claimant 84, P.S	Nancy Lee	26 "	8 1/2 "
Lord Broux 2d 1730	Hazen's Bess	24 "	11 "
Cœur de Lion 318	Maud Lee	23 "	
Bel Caliph 1432	Mollie Garfield (estimated)	22 "	12 "
Rioter 2d 469	Eurotas	22 "	7 "
Rajah 340	Oonan	22 "	2 1/2 "
Landseer 331	Landseer's Fancy	21 "	15 "
Orange Peel 864	Valma Hoffman	21 "	9 "
Homer H. 3683	Jimmy Dodo H	21 "	8 "
Duke of Darlington 2460	Bomba	21 "	11 "
Lemon 170	Nelly	21	
Albert 44	Lady Mel 2d	21	
Earl of Willow Glen 2043	Mary M. Alison	20 "	14 "
Gilderoy 2107	Chrome Skin	20 "	10 "
St. Helier 45	Chroma	20 "	6 "
Hero 90, P. S	Daisy of St. P	20 "	5 1/2 "
Rioter 670	Duchess of B	20 "	1/2 "
St. Helier 45	Meines 3d	20 "	

DAMS OF TWENTY-POUND COWS.

Princess 452, F. S	Princess 2d	27 lbs.	10 oz.
Ecornée 846, F. S	Ona	20 "	13 "
Lolly of St. L. 5480	Mary Anne of St. L	27 "	9 1/4 "
Jenny 7827	Jersey Belle of S	25 "	3 "
Value 5433	Value 2d	25 "	2 11/12 "
Nonpareil 1248, F. S	Nancy Lee	26 "	8 1/2 "
Zina 3d 4134	Hazen's Bess	24 "	11 "
Matilda 2405	Maud Lee	23 "	
Maple Dale 2907	Mollie Garfield	22 "	12 "
Europa 176	Eurotas	22 "	7 "
Omoo 1247	Oonan	22 "	2 1/2 "
Young Fancy 97	Landseer's Fancy	21 "	15 "
Valma 2192	Valma Hoffman	21 "	9 "
Beauty of Darlington 5736	Bomba	21 "	11 "
Jenny Gray 3511	Jenny Dodo H	21 "	8 "
Little Browny 29, P. S	Nelly	21 "	
Lady Mel 429	Lady Mel 2d	21 "	
Traviata 3253	Mary M. Alison	20 "	14 "
Regina 2d 2475	Chromo Skin	20 "	10 "
Ianthe 4562	Chroma	20 "	6 "
Nelly 6456	Daisy of St. P	20 "	5 1/2 "
Angela 1682	Duchess of B	20 "	1/2 "
Meines 3559	Meines 3d	20 "	

It seems the only two bulls that have sired two 20-lb. cows are Khedive 103, P. S., sire of Princess 2d, 27 lbs. 10 oz.; Ona, 20 lbs. 13 oz. It is well here to note that Brown Prince, the grandsire of

the dam of Khedive, was also sire of Little Browny, dam of Nelly, 21 lbs., and Nelly 6456 is dam of Daisy of St. Peters, 20 lbs. 5½ oz., and Chrome Skin descends from same family, 20 lbs. 13 oz. So we have five 20-lb. cows in that family. St. Helier 45, sire of Chroma, 20 lbs. 6 oz.; Meines 3d, 20 lbs. The first a linebred bull, the last an imported bull of unknown breeding, so that we are compelled to count him among the outbred cattle. In no view we can take of the facts as they appear, is inbreeding sustained. Necessity made it excusable at one time, but the good families are too plentiful now to resort to it. In advocating the breeding of animals not akin, we do not wish to be misunderstood. We do not deny the prepotency of many families, and think it well to adhere to those that have several tests in a family. And we are opposed to indiscriminate mixing, and jumping at everything that happens to take the lead for the moment.

We are satisfied that, if a family of cattle uniformly run to 15 lbs. or 16 lbs. per week, it is as likely to produce a phenomenal cow, if the proper nick is made, as any, and much depends on the care of the cow in rearing and attention at the time of the test. And we suggest, as mere theory, that it may not be improbable that the sires and dams of cattle being well cared for gives the offspring a better chance. We will adopt this course for ourselves.

Nor do we want to be misunderstood on this point. We do not intend to say that any amount of feed and attention will accomplish anything without the blood to start with, as something is never made of nothing, but to assert that it is well to develop it. We are, therefore, of opinion that the true course for the breeder is to select families of merit and the type he thinks best, and pursue his own course; but in all cases test, and discard that which is found wanting, it matters not what his preconceived ideas were.

P. S.—It is curious that I omitted to state that Signal 1170 is sire of two 20 lb. cows—Zenella 22 lbs. 1½ oz., and Croton Maid 21 lbs. 14 oz., and since the above was written Stoke Pogis 3d 2238 has the cow Honey Moon of St. Lamberts, 20 lbs. 5½ oz., to his credit; so that there are now four bulls that sired two 20 lb. cows each—two outbred, one linebred, and one inbred outcrossed.

BUTTER TESTS OF JERSEYS.

TABLE I.

Mary Anne, of St. Lambert, 9770.—Yield of milk, 251 lbs.; yield of butter, 26 lbs. 9 oz., not salted; 27 lbs. 9¼ oz., salted; test made Sept. 23 to 29, 1883; age when made, 4 yrs. 6 mos.; property of Valancey E. Fuller, Hamilton, Ont.

Mary Anne of St. Lambert 9770	Stoke Pogis 3d 2238	Stoke Pogis 1259	Young Rioter 75 E.H.B.	
			Essay E. H. B.	
		Marjoram 3239	Dr. Syntax 240 E. H. B.	
			Margaret E. H. B.	
	Lolly of S. L. 5480	Buffer 2055		
			Amelia 484	
		Camelia of St. L. 5106	Lord Lisgar 1066	
			Hebe of St. L. 5117	

Feed—Sept. 23 and 24, 3 qts. ground oats, 2 of pea meal, 1 of oil cake, *thrice daily;* during the other five days, the same *five times daily.*

This test was conducted by appointees of the Canadian Jersey Breeders' Association, and its correctness certified under oath by them. It was the seventeenth week of her continued test.

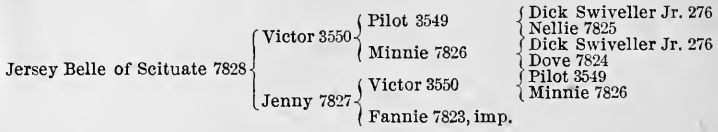
It is to be remarked that the largest tests are in general so well authenticated as to leave no doubt of their accuracy.

Nancy Lee 7618.—Yield of milk, 360 lbs. 12 oz.; yield of butter, 26 lbs. 8½ oz., unsalted; test made June 28 to July 4, 1883; age when made, 7 yrs. 2½ mos.; property of C. Easthope, Niles, Ohio.

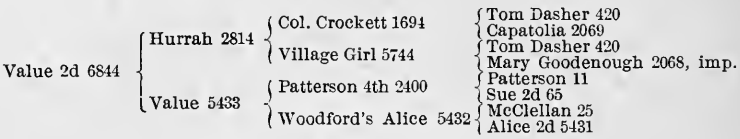
Nancy Lee 7618 A. J. C. C.	Claimant P. 84 C.	Lemon F. 170 C.	Brown Prince 85
		Daphne F. 1066 C.	
	Nonpareil F. 1248 C.		

Feed—2 qts. cornmeal, 3 qts. bran, twice daily; fair pasture.

Jersey Belle of Scituate, 7828.—Yield of milk, 44 to 45 lbs. daily; yield of butter, 25 lbs. 3 oz.; test made June 15 to 21, 1880; age when made, 9 yrs.; property of C. O. Ellms, Scituate, Mass.

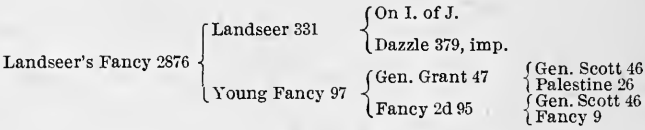


Value 2d 6844.—Yield of milk, 327 lbs.; yield of butter, 25 lbs. $2\frac{1}{2}$ oz., unsalted; test made June 19 to 25, 1883; age when made, 7 yrs. 4 mos.; property of Watts & Seth, Baltimore, Md.



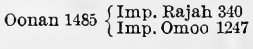
During the test the cow was milked every eight hours. The test was conducted by appointees of the directors of the A. J. C. C.

Landseer's Fancy 2876.—Yield of milk, 123 lbs. 10 oz.; yield of butter, 22 lbs. $7\frac{1}{2}$ oz., unsalted, 21 lbs. 15 oz., salted; test made Dec. 14 to 20, 1883; age when made, 10 yrs.; property of Columbia Jersey Cattle Co., Columbia, Tenn.



This cow was tested by an appointee of the A. J. C. C. It seems from the report made, that in view of the extraordinary ratio of milk to butter, very great precautions were taken, and in view of these the accuracy of the test seems placed beyond doubt.

Oonan 1485.—Yield of milk, 205 lbs. 7 oz.; yield of butter, 22 lbs. $2\frac{1}{2}$ oz., salted; test made June 4 to 10, 1882; property of M. C. Campbell, Spring Hill, Tenn.



Maud Lee 2416.—Yield of butter, 23 lbs., salted; test made Oct. 6 to 13, 1879; age when made, 9 yrs. 1 mo.; property of F. W. Tanner, West Stockbridge, Mass.

Maud Lee 2416 — Cœur de Lion 318, imp.			
Maud Lee 2416 — Matilda 2405	Jester 456	Santa Anna 221, imp.	
		Jessie 544.	
	Minnie 695	Santa Anna 221, imp.	
		Mollie 520.	

Feed—4½ lbs. cornmeal daily. Pasture, good rowen.

Hazen's Bess 7329.—Yield of milk, 344 lbs. 13½ oz.; yield of butter, 24 lbs. 11 oz., salted; test made Nov. 5 to 12, 1883; age when made, 7 yrs. 5 mos. property of C. C. Crockett, Richmond, Ind.

Hazen's Bess 7329 — Lord Bronx 2d 1730	Lord Bronx 938	Bully Bronx 605	
		Sukey 2d 1224	
	Picture 1533	Young Pilgrim 302, imp.	
		Princess 1154, imp.	
Hazen's Bess 7329 — Zina 3d 4134	May Boy 705	Bismark 292, imp.	
		Crocus 1787	
	Zina 1434	Bismark 292, imp.	
		Belle 1225	

Milked during test, thrice daily.

This test was conducted by appointees of the Illinois Jersey Breeders' Association.

Six and a half pounds of cornmeal and four pounds of bran daily. Three days she had daily seven ears of corn also. Two days she had five pounds of cooked potatoes each day. One day she had eight pounds beets and eight pounds turnips. Pasturage, short bluegrass.

Bomba 10330.—Yield of milk, 205 lbs. 6 oz.; yield of butter, 21 lbs. 11½ oz., unsalted; test made Oct. 6 to 12, 1882; age when made, 4 yrs.; property of A. B. Darling, Ramsey's, N. J.

Bomba 10330 — Duke of Darlington 2460	Sarpedon 930	Mercury 432	
		Europa 176	
	Eurotas 2454	Rioter 2d 469	
		Europa 176	
Bomba 10330 — Beauty of Darlington 5736	Smith of Darlington 2458, imp.		
	Grace of Darlington 5574	On I. of J.	
		Violet of D. 5573	

Feed—1st day,	4	qts.	wheat	middlings,	2	qts.	cornmeal.			
2d	"	4	"	"	"	2	"	"		
3d	"	3	"	"	"	2	"	"	1 qt.	linseed
4th	"	3	"	"	"	2	"	"	1 "	"
5th	"	4	"	"	"	1	"	"	1 "	"
6th	"	4	"	"	"	2	"	"	1 "	"
7th	"	4	"	"	"	1	"	"	1 "	"

This test was conducted by appointees of the directors of the A. J. C. C.

Eurotas 2454.—Yield of milk, 216 lbs. 8 oz.; yield of butter, 22 lbs. 7 oz.; test made Feb. 26 to March 4, 1879; age when made, 8 yrs.; property of A. B. Darling, New York.

- Eurotas 2454
  - Rioter 2d 469, imp.
    - Rioter 746 E. H. B.
      - Pedlar 631 E. H. B.
      - Rita, imp.
    - Lot 78 Dauncey's Sale
      - D'Orsay 256 E. H. B.
      - Picotee
  - Europa 176
    - Jupiter 93
      - Saturn 94
      - Rhea 166
    - Alphea 171
      - Saturn 94
      - Rhea 166

Tenella 6712.—Yield of butter, 22 lbs. 1½ oz.; test made Nov. 18 to 26 1881; age when made, 4½ yrs.; property of J. B. Wade, Atlanta, Ga.

- Tenella 6712
  - Signal 1170
    - Marius 760
      - Willie Boy 434
        - Lady Mary 1148
      - Lady Mary 1148, imp.
    - Pansy Morris 2060
      - Albert 44
      - Pansy 6th 38
  - Alda 3872
    - Gr. Duke Alexis, imp. in dam Victorine La Chaise 2740
    - Archie 1112, imp.

Croton Maid 5305.—Yield of milk, 254 lbs. 6 oz.; yield of butter, 21 lbs. 11½ oz., salted; test made June 28 to July 5, 1881; age when made, 5 yrs. 2½ mos.; property of Clark and East, Nashville, Tenn.

- Croton Maid 5305
  - Signal 1170
    - Marius 76
      - Willie Boy 434
      - Lady Mary 1148
    - Pansy Morris 206
      - Albert 44
      - Pansy 6th 38
  - Lucilla 2735, imp.

Feed—Bran, 13 qts.; cornmeal, 5 qts.; hay and pasture.

Jenny Dodo H. 14448.—Yield of butter, 21 lbs. 8 oz., salted; test made June 20 to 27, 1883; age when made, 5 yrs. 2½ mos.; property of W. H. Blasdell, Barton's Landing, Vt.

- Jenny Dodo H. 14448
  - Homer II. 3683
    - The Squire 1298
      - Mr. Toodles 377
      - Mattie 994
    - Gilda 2779
      - Critic 540
      - Lady Godfrey 678
  - Jenny Grey 3511
    - Major Adam 1044
      - Duke of Wellington 35
      - Lavinia 1079.
    - Lady Lightfoot 2745
      - Young Major 214
      - Tulip 1793

It is stated that during this test the cow was never fed, and had only "what she got from the pasture," a hill pasture, where, with two other cows, she had run all the season.

Pearl Armstrong 2670.—Yield of milk, 317 lbs.; yield of butter, 21 lbs. 10 oz., salted ½ oz. to lb.; test made June 3 to 9, 1882; age when made, 10 yrs. 5 mos.; property of Woodside Farm Herd, Troy, N. Y.

Pearl Armstrong 2670 { Imp. Young Baron 702 / Virtue Lass 1782, imp.

Feed—4 lbs. cornmeal, 4 lbs. wheat bran; pasture.

Valma Hoffman 4500.—Yield of butter, 21 lbs. 9 oz., salted; test made July 22 to 29, 1883; age when made, 10 yrs. 5 mos.; property of Saml. T. Earle, Queen Anne county, Md.

Valma Hoffman 4500 { Orange Peel 864, imp. / Valma 2192 { Black Imperial 255 { Derby 253 / Bronx 306 } / Horseshoe 1260 { Sam 402 / Ann 1174 } }

This test was made six months and twenty-two days after the cow had calved.

Nelly 6456.—Yield of milk, 344 lbs.; yield of butter, 21 lbs.; test made May 27 to June 2, 1881; age when made, 9 yrs.; property of Samuel Stratton, Litchfield, Ill.

Nelly 6456, imp. { Lemon 170 F. S. { Young Glory F. S. 137 { Barney F. S. 87 / LaHogue F. S. 166 } / Pale Topsey F. S. 563 } / Little Browny 29 F. S. { Brown Prince 85 F. S. { Prince of Wales / LaHouguette 167 F. S. }

Feed—3 times daily; each feed 2 qts. cornmeal, 4 qts. bran, ⅓ qt. oilmeal; pasture, rye and bluegrass.

Mary M. Allison 6308.—Yield of milk, 254½ lbs.; yield of butter, 20 lbs. 14 oz., unsalted; test made Sept. 18 to 24, 1882; age when made, 5 yrs. and 10 days; property of C. W. H. Eicke, West Monterey, Pa.

Mary M. Allison 6308 { Earl of Willow Glen 2043 { Majestic 2d 1201 { Majestic 152, imp. / Lurline 1325, imp. } / Queechy 3827 { Prince Charles 816 / Belle 194 } } / Traviata 3253 { Mogul 532, imp. / Niobe 3d 506 { Iron Duke 18 / Niobe 99, imp. } }

During the test the cow was milked three times each day.

Ona 7840.—Yield of milk, 149⅜ lbs.; yield of butter, 20 lbs. 13 oz. unsalted; test made June 20 to 28, 1883; age when made, 6 yrs. and 4 mos.; property of S. M. Burnham.

Ona 7840
- Khedive 103, P. S. H. C.
  - Leo 198, F. S. H. C.
  - Coomassie 1442, F. S. H. C.
- Ecornie 846, F. S. H. C.

Feed—4 qts. bran, 4 qts. cornmeal, 1 qt. oilmeal, daily; pasture, June grass, timothy, red top.

Chrome Skin 7881.—Yield of milk, 226 lbs. 8 oz.; yield of butter, 20 lbs. 10 oz., salted; test made June 22 to 29, 1883; age when made, 5 yrs. 2 mos. property of H. M. Howe, Bristol, R. I.

Chrome Skin 7881
- Gilderoy 2107
  - Magnetic 1428
    - Islander 561
    - Azalea 1443
  - Jeanne Le Bas 2476, imp.
    - John Le Bas 398, imp.
    - Dairy Pride 348
- Regina 2d 2475, imp.
  - Noble 104, J. H. F.
  - Regina 32, J. H. F.

Feed—Cornmeal, shipstuff and bran; fair pasture.

Chroma 4572.—Yield of butter, 20 lbs. 6 oz.; age when made, 7 yrs. and over; property of O. S. Hubbell, Stratford, Conn.

Chroma 4572
- St. Helier 45
- Ianthe 4562

Duchess of Bloomfield 3653.—Yield of milk, 317 lbs. 8 oz.; yield of butter, 20 lbs. ½ oz.; test made April 21 to 27, 1882; age when made, 8 yrs. 2 mos.; property of Campbell Brown, Spring Hill, Tenn.

Duchess of Bloomfield 3653
- Imp. Rioter 670
- Angela 1682
  - Roxbury 247
    - Imp. Commodore 229
    - Rose 709
  - Imp. Europa 121

Milked and fed twice daily.

Feed—12 lbs. cornmeal; 4 lbs. wheat bran, and 4 lbs. cottonseed meal; no hay; pasture, bluegrass, good.

Daisy of St. Peters 18175.—Yield of milk, 346 lbs. 1 oz.; yield of butter, 20 lbs. 5½ oz., unsalted; test made June 19 to 25, 1883; age when made, 6 yrs.; property of C. Easthope, Niles, Ohio.

- Daisy of St. Peters 18175
  - Hero, P. 90, H. C.
    - Welcome 172, F. H. C.
    - Musique, F. 1096, H. C.
  - Nelly, F. 1578, C. 6456, A. J. C. C.
    - Lemon, F. 170.
    - Little Browney, P. 29, C.

Feed—5 qts. cornmeal and 3 qts. wheat bran, twice daily; pasture, clover, timothy.

Meines 3d 7741.—Yield of milk, 272 lbs.; yield of butter, 20 lbs. 1 oz.; salted less 1 oz. to lb.; test made July 6 to 12, 1883; age when made, 6 yrs. 3 mos.; property of V. E. Fuller, Hamilton, Ont.

- Meines 3d 7741
  - St. Helier 45, imp.
  - Meines 3559
    - Marquis 1401, imp.
    - Helen 3556
      - Gen. Grant 1409
      - Motly 3554

Feed during the test was 12 qts. daily of chopped oats and clover; clover hay in stable, and clover pasture.

Phædra 2561.—Yield of milk, 263 lbs. 12 oz.; yield of butter, 19 lbs. 13 oz., salted; test made Jan. 15 to 21, 1882; age when made, 9 yrs.; property of Wm. Simpson, New York.

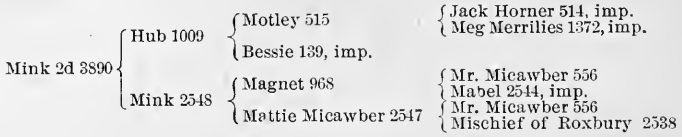
- Phædra 2561
  - Mercury 432
    - Jupiter 93
      - Saturn 94, imp.
      - Rhea 166, imp.
    - Alphea 171
      - Saturn 94, imp.
      - Rhea 166, imp.
  - Leda 799
    - Jupiter 93
      - Saturn 94, imp.
      - Rhea 166, imp.
    - Europa 176
      - Jupiter 93
      - Alphea 171

Feed—Corn and oats ground together; a little oilmeal; roots cut fine and sprinkled with bran; plenty of good clover hay; no pasture.

Oakland Cora.—Yield of milk, 169 lbs.; yield of butter, 19 lbs. 9½ oz., unsalted; test made March 30 to April 5, 1883; age when made, 5 yrs. 9 mos.; property of V. E. Fuller, Hamilton, Ont.

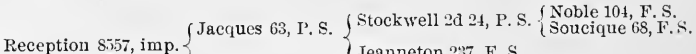
- Oakland Cora 18853, imp.
  - Jersey Boy 92, P. S. H. C.
    - Welcome 172, H. C. F. S.
    - Souris 1107, H. C. F. S.
  - Lively 1401, F. S.

Mink 2d 3890.—Yield of milk, 324 lbs.; yield of butter, 19 lbs. 11 oz., salted; test made July 14 to 20, 1882; age when made, 7 yrs. 7 mos.; property of W. B. Montgomery, Starkville, Miss.

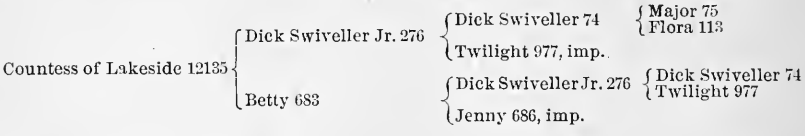


Feed was steamed cotton seed, wheat bran and cornmeal; reasonably good pasture.

Reception 8557, imp.—Yield of butter, 19 lbs. 8 oz.; property of W. R. McCready, Saugatuck, Conn.

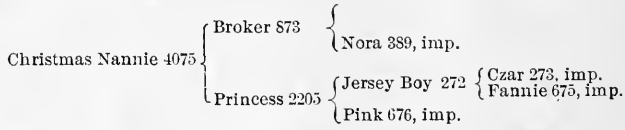


Countess of Lakeside 12135.—Yield of milk, 251 lbs.; yield of butter, 19 lbs. 7 oz., unsalted; test made April 6 to 15, 1882; age when made, 14 yrs. 1 mo.; property of J. H. Walker, Worcester, Mass.



Feed—4 qts. mixture of equal parts of oats, middlings and new process linseed meal, twice daily; hay.

Christmas Nannie 4075.—Yield of butter, 19 lbs. 7 oz., salted; test made June 4 to 11, 1883; age when made, 9 yrs. 6 mos.; property of A. W. Sawyer, Sycamore, Ill.



Feed—1 qt. cornmeal, 3 qts. wheat middlings, daily; pasture, good timothy and clover.

Rosebud of Allerton 6352.—Yield of butter, 19 lbs. 12 oz., unsalted; age when made, 4 yrs. 6 mos.; property of Mrs. J. B. Turner, Waynesboro, S. C.

- Rosebud of Allerton 6352
  - Fortunatus 1152
    - Mogul 532, imp.
    - Juniata 1289
      - Cadmus 4
      - Danae 3d 1287
  - Rhoda of Merion 5849
    - Fortunatus 1152
      - Mogul 432
      - Juniata 1289
    - Nelly Potts 1910
      - Saracen 480
      - Janet 664

Alluring 5541.—Milk was neither weighed nor measured; yield of butter, 19 lbs. 5 oz., salted; test made July 20 to 27, 1882; age when made, 5 yrs. 6 mos.; property of Wm. N. McConnell, Dartford, Wis.

- Alluring 5541
  - Columbiad 2d 1515
    - Columbiad 534
    - Celestia 1898
      - Pearldrop 1409, imp.
  - Purity 1408, imp.

This test is stated to have been made on grass alone. The cow was not fed; she had wild pasture during the day, "tame at night."

Nellie Darlington 5956.—Yield of milk, 194 lbs. 4 oz.; yield of butter, 15 lbs. 3 oz., unsalted; test made March 20 to 26, 1883; property of A. B. Darling, Ramsey's.

- Nellie Darlington 5956
  - Smith of Darlington 2458
  - Grace Darlington 5577
    - On I. of J.
    - Violet of Darlington 5573, imp.

Feed—3 qts. corn and 3 qts. oats daily.

Dot of Bear Lake 6170.—Yield of milk, 213 lbs.; yield of butter, 19 lbs. 4 oz., salted; test made Feb. 4 to 10, 1883; age when made, 6 yrs. 11 mos.; property of Jno. C. Drake.

- Dot of Bear Lake 6170
  - Pr. of Warren 1512
    - Southampton 117, imp.
    - Golddrop 222, imp.
  - Monmouth Duchess 2d 4619
    - Optimus 1607
      - Sir Charles 131
      - Carrie 3894
    - M. Duchess 3895
      - Hector 129
      - Julia 3893

Feed during the test was 5 lbs. cornmeal, 4 lbs. oats, 5 lbs. wheat bran, with what hay she would eat.

Bertha Morgan 4770.—Yield of milk, 294 lbs.; yield of butter, 19 lbs. 6 oz.; test made Jan. 10 to 17, 1882; age when made, 9 yrs.; property of Edward Worth, Wawa, Pa.

- Bertha Morgan 4770
  - Lopez 313, imp. in dam
    - Amy 395, imp.
    - Bijou (F. S. J. H. B. 65).
  - Patterson's Beauty 4760
    - Ariene 1071, imp.

Roland's Bonnie 2d 18054.—Yield of milk, 217 lbs.; yield of butter, 19 lbs. 2 oz., unsalted; test made Jan. 13 to 19, 1883; age when made, 4 yrs. 11 mos.; property of J. H. Walker, Worcester, Mass.

- Roland's Bonnie 2d 18054
  - Star F. 8361
    - Byron 279
      - Mark Tapley 270
      - Bettie 683
    - Sylvia, 687
      - Abe Lincoln 268
      - Millie 690
  - Roland's Bonnie 18053
    - Roland of Deersfoot 8363
      - Albion 490
      - Rose 2714
    - Birdie Romeo 18052
      - Jessie's Romeo 8562
      - Jesse 986

Feed—9 qts. equal parts cornmeal and shorts; no pasture.

Fair Lady 6723.—Yield of milk, 233 lbs.; yield of butter, 19 lbs., salted 1 oz. to lb.; test made June 17 to 23, 1883; age when made, 6 yrs. 6 mos.; property of the Columbia Jersey Cattle Co., Columbia, Tenn.

- Fair Lady 6723
  - Guy Mannering 698
    - On Island
    - Brunette Lass 1780, imp.
  - Fanny Fair 4136
    - Guy Mannering 698
    - Lady Fair 1765

Feed—6 qts. daily of oats and corn ground together with cut hay; pasture, bluegrass and white clover.

Thisbe 2d 2201.—Yield of milk, 372 lbs. 14 oz.; yield of butter, 19 lbs. 1½ oz., salted; test made April 19 to 26, 1882; age when made, 10 yrs. 6 mos.; property of Jno. E. Stiles, Artesia, Miss.

- Thisbe 2d 2201
  - Cliff 176
    - Dick Swiveller 159
      - Sark 123
      - Imp. Mollie 370.
    - Imp. Fanny 365
  - Thisbe 607
    - Bertie 267
      - Pilot 3, imp.
      - Fanny 10
    - Wybie 595
      - Charleston 1
      - Princess 836

Feed was raw cottonseed and dry bran, with good pasture mixed grasses.

Beauty of Jersey 7850.—Yield of milk, 280 lbs. 15 oz.; yield of butter, 19 lbs. 2 oz., unsalted; test made July 19 to 25, 1882; age when made, 6 yrs. 4 mos.; property of W. J. Chinn, Frankfort, Ky.

Beauty of Jersey 7850 { Dick, F. S. J. H. B. 223 / Mignonne, F. S. J. H. B. 955

Feed—1 qt. cornmeal, 1½ qts. wheat bran, one pint of oilmeal, twice daily; pasture, good bluegrass.

Magna 2238.—Yield of butter, 19 lbs. 1 oz., unsalted; test made Oct. 19 to 26, 1882; age when made, 14 yrs.; property of W. B. Dinsmore, Staatsburg, N. Y.

Magna 2238, imp.

Rissa 16014.—Yield of milk, 210 lbs.; yield of butter, 19 lbs., unsalted; test made June 2 to 9, 1882; age when made, 5 yrs.; property of Nathan Brownell, Hubbardsville.

Rissa 16014, F. S. 2173

Countess Potoka 7496.—Yield of milk, 220 lbs. 9 oz.; yield of butter, 18 lbs. 15 oz., unsalted, thoroughly worked, increased in weight when salted; test made May 14 to 20, 1882; age when made, 4 yrs. 1 mo.; property of Thos. H. Malone, Nashville, Tenn.

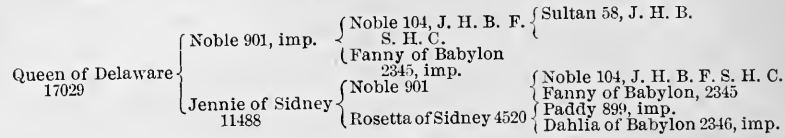
Countess Potoka 7496 { Fanchon's King 2637 { Jersey King 879 { Albert 44 / Grinella 1302 } / Fanchon 2d 1958 { Rob Roy 17 / Fanchon 912 } } / Carrie Lena 3348 { Sam 980, imp. / Lena 3347 { Albert 44 / Hattie 2d 2901 } }

Feed—Cornmeal, 6 qts. twice daily; pasture, bluegrass, very good.

Lady Gray of Hill Top 6850.—Yield of milk, 42 lbs. per day; yield of butter, 18 lbs. 12 oz.; property of R. J. Fair, Wallingford, Conn.

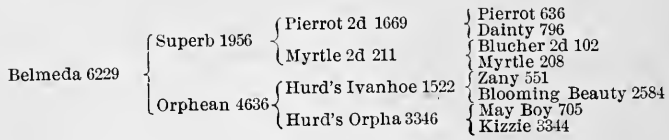
Lady Gray of Hill Top 6850 { Wethersfield 966 { Albert 44 { Jerry 15, imp. / Frankie 17, imp. } / Grinnella 2d 1303, imp. in dam. { Grinnella 1302, imp. / Eugenie 792, imp. } } / Bess Lena 3349 { Sam 980, imp. in dam. { Albert 44 / Hattie 2d 2901 } / Lena 3347 } }

Queen of Delaware 17029.—Yield of milk, 252 lbs.; yield of butter, 18 lbs. 13 oz., salted; test made June 24 to 30, 1882; age when made, 4 yrs. 1½ mos.; property of A. Baker, West Dryden, N. Y.

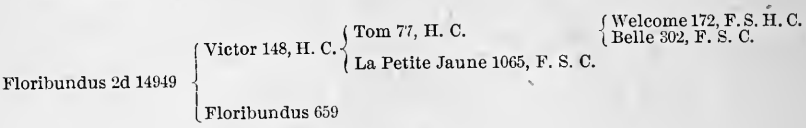

Queen of Delaware 17029
Noble 901, imp.
Noble 104, J. H. B. F. S. H. C.
Sultan 58, J. H. B.
Fanny of Babylon 2345, imp.
Jennie of Sidney 11488
Noble 901
Noble 104, J. H. B. F. S. H. C.
Fanny of Babylon, 2345
Rosetta of Sidney 4520
Paddy 899, imp.
Dahlia of Babylon 2346, imp.

Her feed was grass alone; timothy just heading.

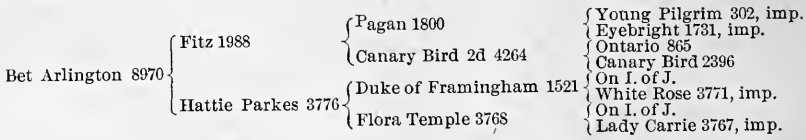
Belmeda 6229.—Yield of milk, 202 lbs. 12 oz.; yield of butter, 18 lbs. 12 oz., salted 1 oz. to lb.; test made April 3 to 9, 1883; age when made, 6 yrs. and 3 days; property of G. R. Dykeman, Shippensburg, Pa.



Floribundus 2d 14949.—Yield of butter, 18 lbs. 8 oz., salted; test made June 24 to July 1, 1883; age when made, 4 yrs. 4 mos.; property of L. L. Tozier, Batavia, N. Y.



Bet Arlington 8970.—Yield of milk, 236 lbs.; yield of butter, 18 lbs. 11 oz., salted; test made June 15 to 21, 1883; age when made, 5 yrs. 3 mos.; property of N. C. Stoughton, Riverside, Mass.



Feed—10 lbs. cornmeal daily; early cut hay; pasturage, rather short.

May Blossom 5657.—Yield of milk, 228 lbs. 3 oz.; yield of butter, 18 lbs. 11 oz., salted; test made May 23 to 29, 1883; age when made, 6 yrs. 2 mos.; property of Wm. Simpson, New York.

- May Blossom 5657
  - Litchfield 674
    - Hopewell 136, imp.
    - La Belle Helene 457, imp.
  - Bessie Allen 3719
    - Tom Dasher 420
      - Albert 44
      - Flora 420
    - Allen's Fawnette 3722
      - Living Storm 173
      - Little Fawn 3308

Feed—Corn and oats ground together, with a little oilmeal; pasture, very good.

Island Star 11876.—Yield of butter, 18 lbs. 10 oz., unsalted; test made May 30 to June 5, 1883; age when made, 4 yrs. 2 mos.; property of S. W. Burnham.

- Island Star 11876
  - Guy Fawkes 251, F. S. H. C.
    - Koffee H. C. F. S. 233
      - Nonpareil P. S. 37 H. C.
      - Coomassie 1442 F. S.
    - Angelica F. S. 1738 H. C.
  - Gazelle F. S. 1726
    - Koffee H. C. 233 F. S.
      - Nonpareil P. S. 37 H. C.
      - Coomassie F. S. 1442 H. C.
    - Lydia
      - Lydia F. S. 219

Feed—4 qts. cornmeal, 4 qts. bran daily; pasture, June grass, timothy redtop.

Belle Grinnell 4073.—Yield of butter, 18 lbs. 8 oz., unsalted; test made June 11 to 18, 1882; age when made, 7 yrs. 11 mos.; property of S. W. Robbins, Wethersfield, Conn.

- Belle Grinnell 4073
  - Monitor 878
    - Rob Roy 17, imp.
    - Emma 801, imp.
  - Grinnella 2209 3d
    - Albert 44
      - Jerry 25, imp.
      - Frankie 17, imp.
    - Grinnella 1302, imp.

Feed—4 qts. cornmeal night and morning; rough, bushy pasture.

Mollie Garfield 12172.—Yield of butter, 18 lbs. 7 oz.; property of F. S. Peer, East Palmyra, N. Y.

- Mollie Garfield 12172
  - Bel Caliph 1432
    - Belisario 640
      - Pilot Boy 488
      - Flora 1422
    - Calliope 1326
      - John Le Bas 398, Noble 71 J. H. B
      - Caltha 877
  - Maple Dale 2907
    - Victor 797, imp.
    - Susa 1990, imp.

Rosa of Belle Vue 6954.—Yield of milk, 205 lbs. 8 oz.; yield of butter, 18 lbs. 7½ oz., unsalted, thoroughly worked, increased in weight when salted; test made August 3 to 9, 1882; age when made, 6 yrs. and over; property of Thos. H. Malone, Nashville, Tenn.

Rosa of Belle Vue 6954
- Remarkable 229 F. S.
  - Orange Peel 2d 36 P. S.
    - Orange Peel 129 F. S.
    - Fairy 332 F. S.
  - Young Rose 43 P. S.
    - Orange Peel 129 F. S.
    - Rose 339 F. S.
- Bye-Bye 3180 F. S.

Feed—Cornmeal, 6 qts., twice daily; pasture, bluegrass, dry and poor.

Summerline 8001.—Yield of milk, 264 lbs. 6 oz.; yield of butter, 18 lbs. 6 oz., unsalted; test made August 7 to 14, 1883; age when made, 5 yrs. 5 mos.; property of C. W. H. Eicke, West Monterey, Pa.

Summerline 8001
- Bristol Chief 1476
  - Wethersfield 766
    - Albert 44
    - Grinella 2d 1303
  - Judy 571
    - Comet 223
    - Daisey 672, imp.
- Salsoda 3721
  - Sam 980
    - On I. of J.
    - Eugenia 792, imp.
  - Hattie 2d 2701
    - Bill Jr 182
    - Hattie 428

The cow calved in January, and was served April 28, 1883.

Eveline of Jersey 6781.—Yield of milk, "average of 18 quarts"; yield of butter, 18 lbs. 6 oz.; test made July 25 to 31; age when made, 5 yrs.; property of Edward L. Clarkson, Tivoli, N. Y.

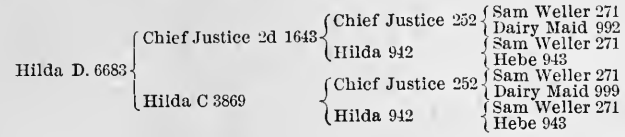
Imp. Eveline of Jersey 6781
- Grey Prince F. S. 168
  - Duke 4th 10 F. S.
    - Clement 115—61 F. S.
    - Queen Mab 180 F. S.
  - Siren F. S. 371
- Daisy F. S. 1355

Imp. Butter Star 7799.—Yield of milk, 316 lbs. 8 oz.; yield of butter, 18 lbs. 4½ oz.; test made July 13 to 19, 1882; age when made, 4 yrs. 5 mos.; property of Campbell Brown, Spring Hill, Tenn.

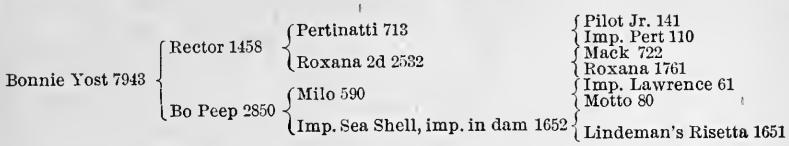
Imp. Butter Star 7799
- Butter Stamp P. S. 101 J. H. B.
  - Trust 162 J. H. B.
    - Renault's bull
    - Cow belonging to Y. Beaudains, St. Peters
  - Sultane P. S. 7 J. H. B.
    - Sultan, F. S. 58, J. H. B.
    - Longueville Queen F. S. 72, J. H. B.
- Starlight 136 J. H. B.
  - Trust 162 J. H. B.
    - Renault's bull
    - Cow of Y. Beaudains
  - Fire Fly 415 J. H. B.
    - Pallot's Welcome
    - Lady Jane F. S. 274, J. H. B.

Feed—Fed twice daily; at each meal 3 qts. coarse corn-chop, 2 qts. bran, 1 pint cottonseed meal. Died of milk fever, 1883.

Hilda D. 6683.—Yield of milk, 268 lbs. 8 oz.; yield of butter, 18 lbs. 5 oz., unsalted; test made May 27 to June 2, 1883; age when made, 6 yrs. 3 mos.; property of Frederic Bronson, Southport, Conn.

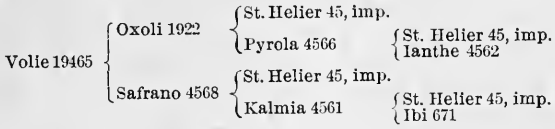


Bonnie Yost 7943.—Yield of milk, 226 lbs. 6 oz.; yield of butter, 18 lbs. 2 oz., unsalted; test made May 9 to 16, 1883; age when made, 4 yrs. 11 mos.; property of M. M. Gardner, Nashville, Tenn.



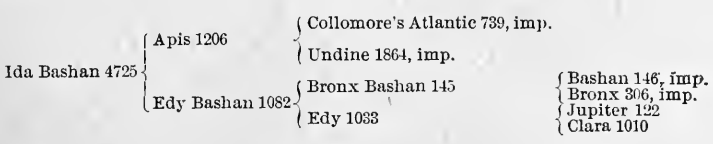
Feed—6 qts. cornmeal, daily; pasture, bluegrass, very good.

Volie 19465.—Yield of butter, 18 lbs. 1 oz., unsalted; test made June 12 to 18, 1883; age when made, 6 yrs. 2 mos.; property of Henry Sanford, Bridgeport, Conn.



No Feed—Very good old pasture.

Ida Bashan 4725.—Yield of milk, 126 qts.; yield of butter, 18 lbs., unsalted; test made June 12 to 19, 1883; age when made 7 yrs. 3 mos.; property of Jno. F. Maxfield, Bloomfield, N. J.



Feed—4 qts. of meal and cut hay morning and evening.

Roonan 5133.—Yield of milk, 284 lbs.; yield of butter, 18 lbs. 2 oz. salted; test made April 4 to 10, 1883; property of M. C. Campbell, Spring Hill, Tenn.

- Roonan 5133
  - Rupert 1456
    - Pertinatti 713
      - Pilot Jr. 141
      - Pert 110
    - Roxana 1761
      - Roxbnry 247
      - Cowslip 5th 849
  - Oonan 1485
    - Imp. Rajah 340
    - Imp. Omoo 1247

Melia Ann 5444.—Yield of milk, 245 lbs.; yield of butter, 18 lbs. ½ oz., unsalted; test made August 2 to 9, 1883; age when made, 8 yrs. 2 mos.; property of J. H. Walker, Worcester, Mass.

- Melia Ann 5444
  - Lord Aylmer 1067
    - Lord Lisgar 1066
      - Victor Hugo 197
      - Pauline 494
    - Pauline 494
  - Amelia 2d 1730
    - Victor Hugo 197
    - Amelia 484

Patterson's Beauty 4760.—Yield of butter, 18 lbs.; property of Jno. Patterson, Philadelphia, Pa.

- Patterson's Beauty 4760
  - Bijou F. S. 65
  - Ariene 1071, imp.

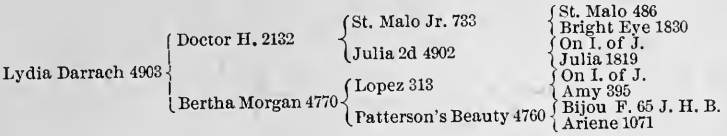
Regina 4th 12732.—Yield of milk, 187 lbs. 8 oz.; yield of butter, 17 lbs. 13½ oz., salted; test made Aug. 23 to 29, 1883; age when made, 7 yrs.; property of H. M. Howe, Bristol, R. I.

- Regina 4th 12732, imp.
  - Pasha 64, J. H. B.
    - Rattler 20, J. H. B.
      - Noble 104, J. H. B.
      - Lady Jane 174, J. H. B.
    - Sultane P. S. 7, J. H. B.
      - Sultan 58, J. H. B.
      - Longueville Queen, J. H. B.
  - Regina 32, J. H. B.
    - Old Noble
    - Mignonne

Royal Princess 2370.—Yield of milk, 160 lbs.; yield of butter, 17 lbs. 12 oz.; test made Dec. 28, 1880, to Jan. 3, 1881; age when made, 7 yrs. 8 mos.; property of Miss Alvin Adams, Watertown.

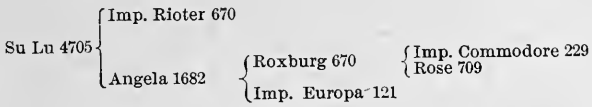
- Royal Princess 2370
  - Daniel Webster 403
    - Sire on J. of J.
    - Floss 292
  - Princess Royal 2d 1005
    - Butterfly 156
      - Butterfly, owned by Mr. L. Gallais, or J. of J.
      - Newton Belle 355, imp.
    - Princess Royal 357
      - Butterfly, as above.
      - Dam imp.

Lydia Darrach 4903.—Yield of milk, 238½ lbs.; yield of butter, 17 lbs. 14, oz.; test made May 4 to 11, 1883; property of Edwd. Worth, Wawa, Pa.



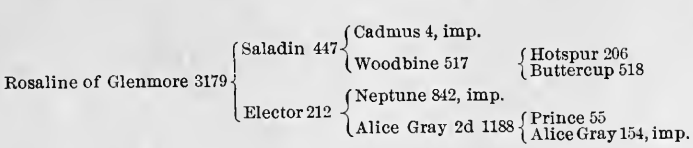
Test under appointees of the directors of the A. Jersey Cattle Club.

Su Lu 4705.—Yield of milk, 241 lbs. 11 oz.; yield of butter, 17 lbs. 15 oz.; test made June 6 to 12, 1883; age when made, 6 yrs. 8 mos.; property of Campbell Brown, Spring Hill, Tenn.

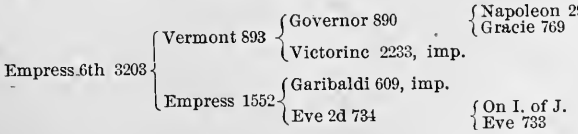


Feed—Fed twice each day: at each meal, chopped oats, 3½ lbs.; cornmeal, 3 lbs.; beanmeal, 1 lb.; cottonseed meal, 1 lb.; hay, cut, 1 lb.; the whole mixed and dampened.

Rosaline of Glenmore 3179.—Yield of milk, 183 lbs.; yield of butter, 17 lbs. 10 oz., salted; test made Dec. 19 to 25, 1881; age when made, 8 yrs. 9 mos.; property of Campbell Brown, Spring Hill, Tenn.



Empress 6th 3203.—Yield of butter, 17 lbs. 9¾ oz., unsalted; test made July 1 to 7, 1882; property of Mc V. Barnard, Forestville, Conn.



Oak Leaf 4769.—Yield of butter, 17 lbs. 10 oz.; property of S. M. Burnham, Saugatuck, Conn.

- Oak Leaf 4769
  - Devil's Hoof 866
    - Ontario 865
      - Black Imperial 255
      - Helen 2180
    - Darkness 1345, imp.
  - Echo 2223
    - Lord Nelson 860
      - Derby 253
      - Knapp Cow 2172
    - Edith 2d 805
      - Saturn 94
      - Edith 167

Cordelia Baker 8814.—Yield of butter, 17 lbs. 9 oz., salted; test made May 1 to 7, 1883; age when made, 5 yrs. 1 mo.; property of James B. Wilder.

- Cordelia Baker 8814
  - Bees Wax 1931
    - Wethersfield 966
      - Albert 44
      - Grinella 2d 1303
    - Lily 2578
      - Romeo 982
      - Pansy 1019
  - Pussy Baker 6994
    - Dash of Glastonbury 1959
      - Robbins 953
      - Lady Dash 2523
    - Patty Baker 2529
      - Robbins 953
      - Daffie 2522, imp.

Metah's Queen 4886.—Yield of milk, 258 lbs. 2 oz.; yield of butter, 17 lbs. 9 oz., unsalted; test made June 26 to July 2, 1881; age when made, 5 yrs.; property of Geo. E. Bryant, Madison, Wis.

- Metah's Queen 4886
  - Omaha 482
    - Omoo 1247
  - Metah 1295
    - St. Malo 486, imp.
    - Myrtle 1294

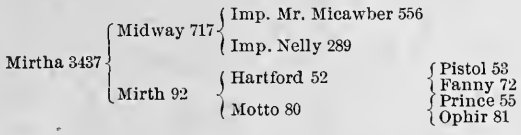
Jo 5th 280.—Yield of butter, 17 lbs. 8 oz., salted; test made June 22 to 29, 1881; age when made, 12 yrs. 8 mos.; property of J. W. Vance, Cantrall, Ill.

- Jo 5th 280
  - Roger 121
    - Jupiter 122
      - Sark 123
      - Jura 224, imp.
    - Jesse 1006
      - Harry 92
      - Sally 253, imp.
  - Jo 3d 245
    - Dick 118
      - Prince Albert 119, imp.
      - Beauty 228, imp.
    - Jo 243, imp.

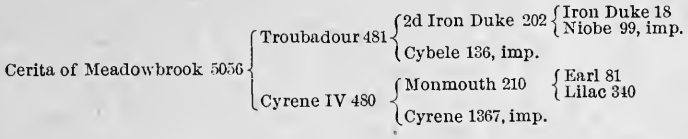
Welma 5942.—Yield of milk, 252 lbs. 1 oz.; yield of butter, 17 lbs. 8 oz., unsalted; test made Oct. 2 to 8, 1882; property of Ariel Low, Jr., Warrensville, Ill.

- Welma 5942
  - Marius 760
    - Willie Boy 434, imp.
    - Lady Mary 1148, imp.
  - Annie Wells 1947
    - Marmion 359, imp.
    - Lillie Fair 1607
      - Clarence 596
      - Bounty 1606

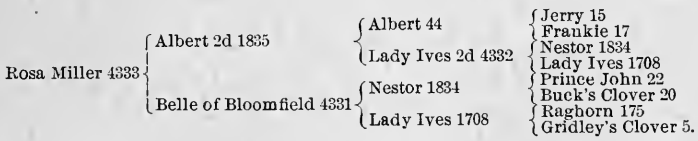
Mirtha 3437.—Yield of milk, 314 lbs. 8 oz.; yield of butter, 17 lbs. 13½ oz., salted 1 oz. to lb.; test made July 18 to 24, 1883; age when made, 8 yrs. 9 mos.; property of Campbell Brown, Spring Hill, Tenn.



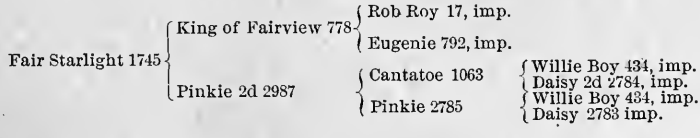
Cerita of Meadowbrook 5056.—Yield of milk, 119 qts.; yield of butter, 17 lbs. 8 oz.; test made April 22 to 29, 1881; age when made, 5 yrs. 2 mos.; property of Newton T. Beale, Rodgersville, Tenn.



Rosa Miller 4333.—Yield of milk, 276 lbs. 8 oz.; yield of butter, 17 lbs. 7 oz., salted; test made Dec. 17 to 24, 1883; age when made, 9 yrs. 10 mos.; property of J. N. Walker, Worcester, Mass.



Fair Starlight 7745.—Yield of milk, 250 lbs. 4 oz.; yield of butter, 17 lbs. 7½ oz., unsalted; test made April 10 to 17, 1883; age when made, 6 yrs. 9 mos.; property of David Strong, Winsted, Conn.



Feed—8 qts. of mixture composed of one-third corn and two-thirds oats ground together; hay, all she would eat; no pasture.

Mamie Coburn.—Yield of butter, 17 lbs. 8 oz.; test made May 2 to 9, 1878; age when made, 4 yrs.; property of Mrs. J. B. Ritzinger, Indianapolis, Ind.

- Mamie Coburn 3798
  - Ramchunder 718
    - Rajah 340
    - Nelly 55
      - Charleston 1
      - Nannie 4
  - Bowley 1946
    - Marmion 359
    - Eve 456
      - Prince of Orange 184
      - Edith 447

Mary Jane of Bellevue 6956, imp.—Yield of butter, 17 lbs. 7 oz.; test made May, 1880; age when made, 4 yrs.; property of V. L. Kirkman, Nashville, Tenn.

- Mary Jane of Bellevue 6956, imp.
  - Remarkable 229, F. S.
    - Orange Peel 2d 31, P. S.
      - Orange Peel 129, F. S.
      - Fairy 332, F. S.
    - Young Rose 43, P. S.
      - Orange Peel 129, F. S.
      - Rose 339, F. S.
  - Nelly 1509, F. S.

Embla 4799.—Yield of butter, 17 lbs. 8 oz.; test made Sept. 1881; age when made, 6½ yrs.; property of C. R. C. Dye, Troy, Ohio.

- Embla 4799
  - Saladin 447
    - Cadmus 4, imp.
    - Woodbine 517
      - Hotspur 206
      - Buttercup 518
  - Elveta 2121
    - Neptune 518, imp. in dam
      - Lady Mary 2104
      - Prince 55
    - Alice Gray 2d 1188
      - Alice Gray 154, imp.

Torfrida 3596.—Yield of milk, 256 lbs. 3½ oz.; yield of butter, 17 lbs. 6½ oz., salted; test made July 14 to 20, 1883; age when made, 9 yrs. and 10 days; property of Wm. Simpson, New York.

- Torfrida 3596
  - Rioter 2d 469, imp.
  - Europa 176
    - Jupiter 93
      - Saturn 94, imp.
      - Rhea 166, imp.
    - Alphea 171
      - Saturn 94, imp.
      - Rhea 166, imp.

Faultless 12018.—Yield of milk, 234 lbs. 13 oz.; yield of butter, 17 lbs. 5½ oz., salted; test made July 14 to 20, 1883; age when made, 8 yrs. 6 mos.; property of Wm. Simpson, New York.

- Faultless 12018, imp.
  - Pasha P. S. 64 J. H. B. C.
  - Cèrise F. S. 737 J. H. B. C.

Vixen 7591.—Yield of milk, 196 lbs. 12 oz.; yield of butter, 17 lbs. 6 oz., unsalted; test made Dec. 12 to 19, 1883; age when made, 5 yrs. 6 mos.; property of M. M. Gardner, Nashville, Tenn.

Vixen 7591	Top Sawyer 1404	Marius 760	Willie Boy 434
			Imp. Lady Mary 1148
		Imp. Emblem 90	
	Roxana 1761	Roxbury 247	Imp. Commodore 229
			Rose 709
		Cowslip 5th 849	Patterson 11
			Cowslip 893

Judith Coleman 13191.—Yield of milk, 208 lbs. 8 oz.; yield of butter, 17 lbs. 5 oz., salted 1 oz. to lb.; test made Oct. 30 to Nov. 5, 1883; age when made, 2 yrs. 11 mos.; property of Rutherford Douglas, Lexington, Ky.

Judith Coleman 11391	John Knox 3289	Red Cloud 2d 2260	Red Cloud 529
			Formosa 1364
		Lady Pigot 5798	2d, imp. in dam.
			Lady Pigot 5797, imp.
	Juliet of St. Lambert 5483	Buffer 2055	Lord Monck 304
			Amelia 484, imp.
		Rosette of St. Lambert 5108	Lord Lisgar 1066
			Victoria 411

Feed—12 qts. wheat bran, 2 qts. cornmeal; pasture, timothy and bluegrass.

Renalba 4117.—Yield of milk, 267 lbs. 8 oz.; yield of butter, 17 lbs. 4½ oz.; test made Feb. 20 to 26, 1882; age when made, 6 yrs. 10 mos.; property of Campbell Brown, Spring Hill, Tenn.

Renalba 4117	Pertinatti 713	Pilot Jr 141	Pilot, imp. in dam 3
			Imp. Jenny 287
		Imp. Pert 110	
	Renebel 2772	Bellisario 640	Pilot Boy 488
			Flora 1422
		Renè Ogden 1568	Don 611
			Renè 2d 56

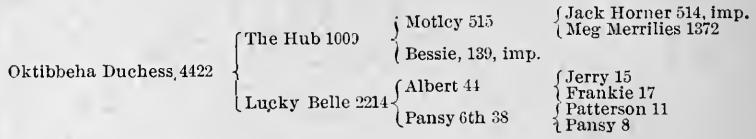
Feed—Wheat bran, cottonseed meal, linseed meal, chopped corn and peas, mixed, 4 qts. per day; hay twice daily; pasture, winter pasture of bluegrass.

Faith of Oaklands, imp. 19696.—Yield of milk, 267 lbs.; yield of butter, 17 lbs. 4 oz., salted; test made Aug. 17 to 23, 1883; age when made, 7 yrs. 6 mos.; property of V. E. Fuller, Hamilton, Ont.

Faith of Oaklands, imp., 19696 A. J. C. C.	Prince of the Valley, 88 P. S. H. C.	Welcome 166, P. S. H. C.	
		Queen of the Valley 740, F. S. H. C.	
	La Sœur		

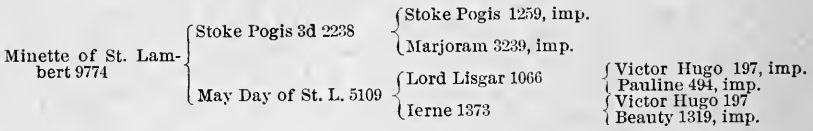
Feed—8 qts. of ground oats daily; pasture, second-crop clover.

Oktibbeha Duchess 4422.—Yield of milk, 282 lbs. 8 oz.; yield of butter, 17 lbs. 4 oz., salted; test made April 7 to 13, 1882; age when made, 7 yrs. 1 mo.; property of W. B. Montgomery, Starkville, Miss.

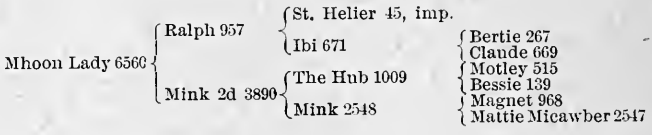


Feed—Steamed cottonseed, cornmeal and wheat bran; good pasture.

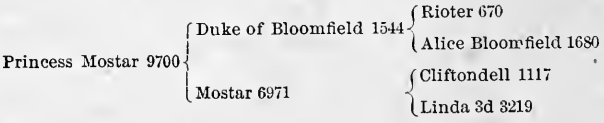
Minette of St. Lambert 9774.—Yield of milk, 297 lbs.; yield of butter, 17 lbs. 4 oz., salted 1 oz. to lb.; test made July 25 to 31, 1883; age when made, 4 yrs. 2 mos.; property of Wm. Rolph, Markham, Ont.



Mhoon Lady 6560.—Yield of milk, 261 lbs. 8 oz.; yield of butter, 17 lbs. 3 oz., unsalted; test made May 29 to June 4, 1883; age when made, 5 yrs. 6 mos.; property of W. B. Montgomery, Starkville, Miss.



Princess Mostar 9700.—Yield of milk, 232 lbs. 15 oz.; yield of butter, 17 lbs. 3 oz., salted; test made April 22 to 29, 1882; age when made, 5 yrs.; property of Jas. Cloud & Sons, Kennett Square, Pa.



Wybie 595.—Yield of butter, 17 lbs. 4 oz.; test made in June, 1875; property of O. S. Hubbell, Stratford, Conn.

Wybie 595 { Charleston 1, imp. in dam Princess 836.
Princess 836, imp.

Fear Not 6059.—Yield of milk, 255 lbs.; yield of butter, 17 lbs. 3 oz., salted; test made Aug. 6 to 12, 1882; age when made, 7 yrs.; property of Woodside Farm Herd, Troy, N. Y.

FearNot 6059 { Sans Peur J. H. B. 201 { Fanchon J. H. B. 1322 F. S.
Lady of the Isles J. H. B. 992 { Brown Prince J. H. B. 86 F. S. H. C. { Prince of Wales / Brownie 113 F. S. H. C.
None Such J. H. B. 334. { Forget me Not J. H. B. 333

Feed—4 lbs. cornmeal, 6 lbs. wheat middlings; pasture.

Colts La Biche 6399.—Yield of milk, 282 lbs. 6 oz.; yield of butter, 17 lbs. 2½ oz., unsalted; test made Feb. 11 to 17, 1882; age when made, 5 yrs. 10 mos.; property of D. A. Givens, Cynthiana, Ky.

Colts La Biche 6399 { Knave 1856 { Hughes 954 { On I. of J. / Daffie 2522
Dusky 2525 { Robbins 923 / Tidy 2520
La Biche 2d 4023 { Pierrot 636
La Biche 905

Feed—Bran, shipstuff, cornmeal, oilmeal, mixed, hay; pasture, bluegrass.

Cream of Sidney.—Yield of milk, 245 lbs. 14 oz.; yield of butter, 17 lbs. 2½ oz.; test made June 26 to July 2, 1881; age when made, 5 yrs. 1 mo.; property of Andrew Baker, West Dryden, N. Y.

Cream of Sidney 17028 { Noble 901, imp. { Noble 104, F. S. / Fanny of Babylon 2375
Rosetta of Sidney 4520 { Paddy 879, imp. / Dahlia of Babylon 2346, imp.

Gipsey 5th 2252.—Yield of butter, 17 lbs. 2 oz., unsalted; test made Aug. 19 to 26, 1883; age when made, 13 yrs. 5 mos.; property of W. B. Dinsmore, Staatsburg, N. Y.

Gipsey 5th 2252 { Napoleon 291, imp.
Gipsey 319, imp.

Cyrene 4th 480.—Yield of milk, 112 qts.; yield of butter, 17 lbs. 1 oz.; test made June 2 to 9, 1879; age when made, 8 yrs.; property of Newton T. Beal, Rogersville, Tenn.

- Cyrene 4th 480
  - Monmouth 210
    - Earl 81
      - Monarch 82, imp.
      - Europa 121, imp.
    - Lilac 340
      - Potomac 153
      - Fawn 323
  - Cyrene 137, imp.

Abbie Z. 3d 14742.—Yield of milk, 288 lbs.; yield of butter, 17 lbs., salted; test made May 5 to 12, 1883; age when made, 4 yrs. 10 mos.; property of J. R. Gaston & Son, Normal, Ill.

- Abbie Z. 3d 14742
  - Deerfoot Boy 1926
    - Albion 490, imp.
      - Bonfanti 388, imp.
      - Czar 273, imp.
    - Daisey of Deerfoot 3182
      - Fannie 675, imp.
  - Abbie Z. 14002
    - Comet 130, imp.
    - Lupar 14001
      - Coventry 760
      - Rose 3d 413

Jersey Cream 3151.—Yield of milk, 266 lbs. 8 oz.; yield of butter, 17 lbs., salted; test made June 15 to 22, 1881; age when made, 7 yrs. 11 mos.; property of D. B. DeWolf, Lee, Mass.

- Jersey Cream 3151
  - Tom Dasher 420
    - Albert 44
      - Jerry 15
      - Frankie 17
    - Flora 420
      - McClellan 3d 27
      - Pansy 6th 38
  - Creampot 460, imp.

Young Fancy 9032.—Yield of milk, 144 qts.; yield of butter, 17 lbs.; test made May 26 to June 1; age when made, 3 yrs. 2½ mos.; property of Isaac W. Stokes, Medford, N. J.

- Imp. Young Fancy 9032
  - Jimmy on Island
  - Lily on Island

Rose 240.—Yield of butter, 17 lbs.; property of Jno. T. Norton, Farmington, Conn.

Rose 240, imp.

Matilda 3238.—Yield of butter, 17 lbs.; property of T. S. Cooper, Coopersburg, Pa.

Matilda 3238, imp.

Maudine of Elmwood 8718.—Yield of milk, 227 lbs. 14 oz.; yield of butter, 16 lbs. 15 oz., salted; test made Sept. 19 to 26, 1883; age when made, 4 yrs. 7 mos.; property of W. B. Dugger, Carlinsville, Ill.

- Maudine of Elmwood 8718
  - Hindoo 2282, imp.
  - Maudine 3d 5646
    - Lord Baltimore 743
      - Fairfax 530
      - Fides 51
    - Maudine 1592
      - Clive 319
      - Jessica 1504

Pyrrha 6100.—Yield of milk, 243 lbs. 14 oz.; yield of butter, 16 lbs. 14½ oz., salted; test made July 14 to 20, 1883; age when made, 6 yrs. 5 mos.; property of William Simpson, New York.

- Pyrrha 6100
  - Zeus 2634
    - Bismarck, 1423, imp.
    - Oweenæ 3314
      - Kearsarge 257
      - Maria 2182
  - Themis 6076
    - Rioter 2d 469, imp.
    - Tethys, 3686 imp.

Almah of Oakland 11102.—Yield of milk, 253 lbs. 9 oz.; yield of butter, 16 lbs. 14 oz., salted; test made May 1 to 7, 1883; age when made, 2 yrs. 11 mos. 24 d.; property of R. J. McMichael, Lexington, Ky.

- Almah of Oakland 11102
  - Thorndale 2582
    - Balsora 2357
      - St. Martin 1482, imp.
      - Bella 5354, imp.
    - Katinka 5264
      - Barney 1491, imp.
      - Kate R 2d 3726, imp.
  - Pandora of Staatsburg 3d 6497
    - Faro 1749
      - Vermont 893
      - Frankie 17, imp.
    - Pandora of Staatsburg 3280
      - Quaker 887, imp.
      - Phebe 3d, 2293

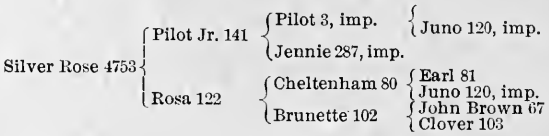
Feed—2 qts. cornmeal, 2 gals. wheat bran, 1 pint oilmeal, daily, with hay; rather poor bluegrass pasture.

Lucky Belle 2d 6037.—Yield of milk, 276 lbs. 8 oz.; yield of butter, 16 lbs. 14 oz., salted; test made May 6 to 12, 1882; age when made, 5 yrs. 4 mos.; property of W. B. Montgomery, Starkville, Miss.

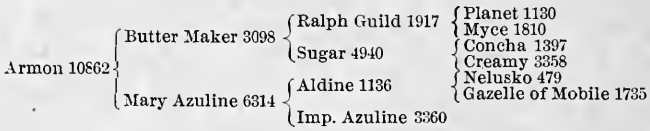
- Lucky Belle 2d 6037
  - Aldine 1136
    - Nelusko 479
      - Rajah 340
      - Nelly 55
    - Gazelle of Mobile 1735, imp.
  - Lucky Belle 2214
    - Albert 44
      - Jerry 15
      - Frankie 17
    - Pansy 6th 38
      - Patterson 11
      - Pansy 8

Fed "liberally on cooked cottonseed, cornmeal and wheat bran"; good pasture.

Silver Rose 4753.—Yield of milk, 264 lbs.; yield of butter, 16 lbs. 14 oz., salted; test made July 1 to 7, 1881; age when made, 5 yrs. 9 mos.; property of Campbell Brown, Spring Hill, Tenn.

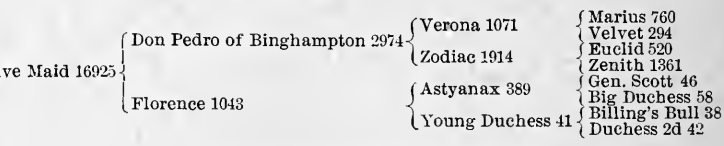


Armon 10862.—Yield of milk, 227 lbs. 5 oz.; yield of butter, 16 lbs. 13½ oz., salted ½ oz. to lb.; test made April 26 to May 3, 1883; age when made, 3 yrs. 7 mos.; property of A. H. French, Aberdeen, Miss.



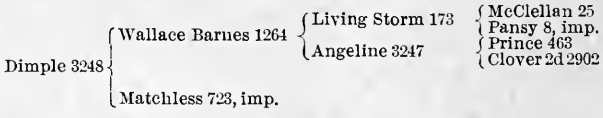
Feed—12 lbs. of cottonseed boiled, 7½ of wheat bran, 4½ of cornmeal; pasture, bluegrass and red clover.

Attractive Maid 16925.—Yield of milk, 240 lbs.; yield of butter, 16 lbs. 13 oz.; test made June 20 to 27, 1883; age when made, 3 yrs. 4 mos.; property of Wm. H. Barr, Redding Ridge, Conn.



Feed—2 qts. cottonseed meal daily; pasture, fair.

Dimple 3248.—Yield of milk, "20 qts. per day"; yield of butter, 16 lbs. 11 oz.; test made May 7 to 14, 1875; age when made, 3 yrs. 10 mos.; property of G. W. Felter, Williamsburg, Ohio.



Feed—Twice, each feed 3 lbs. chops, 2½ lbs. bran; pasture, timothy and bluegrass.

Grinnell Lass 11859.—Yield of milk, 252 lbs. 8 oz.; yield of butter, 16 lbs. 10 oz., unsalted; test made April 20 to 26, 1883; age when made, 2 yrs. 10 mos.; property of Wm. Crozien, Northport.

- Grinnell Lass 11859
  - The Marquis 3805
    - Joseph 3419
      - On I. of J.
      - Josephine F. S. 1621 J. H. B.
    - Dark Eyes 8330, imp.
  - Belle Grinnell 2d 9009
    - Prince Croton 2490
      - Tocsin 1912
      - Glenida 4436
    - Belle Grinnell 4073
      - Monitor 878
      - Grinella 3d 2209

Dusky 2525.—Yield of butter, 16 lbs. 10 oz.; test made in June, 1876; property of J. B. Williams, Glastonbury, Conn.

- Dusky 2525
  - Robbins 953
    - Albert 44
    - Victoria 2d 419
      - Splendid 2
      - Victoria 104
  - Tidy 2520, imp.

Ianthe 8562.—Yield of butter, 16 lbs. 10 oz.; age when made, 8 yrs. and over; property of O. S. Hubbell, Stratford, Conn.

- Ianthe 4562
  - St. Helier 45, imp.
  - Blanche 594
    - Earl 81
      - Monarch 82
      - Europa 121
    - Lily 6th 500
      - Patterson 11
      - Lily 1

Duennas Duchess 5508.—Yield of milk, 239 lbs.; yield of butter, 16 lbs. 10 oz., salted; test made June 16 to 22, 1882; age when made, 5 yrs. 6 mo.; property of G. H. & H. A. Grimmell, Jefferson, Iowa.

- Duennas Duchess 5508
  - Imp. Duke of Greyholdt 1035
  - Duenna 2716
    - Imp. Young Baron 702
    - Imp. Belle of Fleetwood 2551

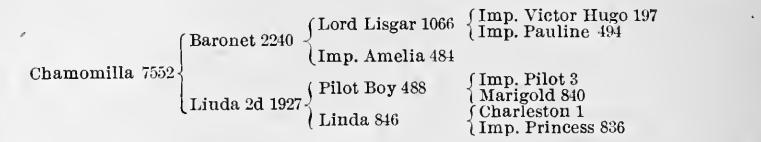
Feed—8 qts. oats and 12 of bran daily.

Dandelion 2521.—Yield of milk, 345 lbs. 6½ oz.; yield of butter, 16 lbs. 9 oz., salted ¾ oz. to lb.; test made Aug. 25 to 31, 1883; age when made, 15 yrs. 6 mos.; property of Jno. I. Holly, Plainfield, N. J.

Dandelion 2521, imp.

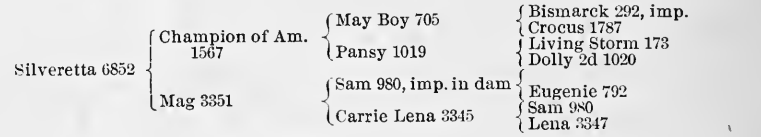
Feed—8 qts. wheat bran, 2 qts. cornmeal, 2 qts. crushed oats.

Chamomilla 7552.—Yield of milk, 223 lbs. 8 oz.; yield of butter, 16 lbs. 10 oz., unsalted; test made May 20 to 26, 1883; age when made, 4 yrs. 11 mos.; property of J. T. & W. S. Shields, Bean's Station, Tenn.

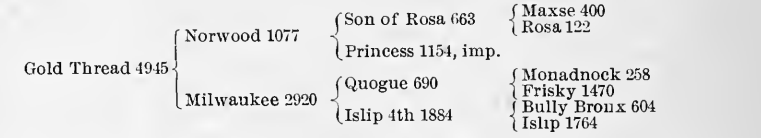


Feed—12 lbs. cornmeal and 3 lbs. cottonseed meal daily; pasture, orchard grass and white clover.

Silveretta 6852.—Yield of butter, 16 lbs. 9 oz.; test made Nov. 20, 1881; age when made, 5½ yrs.; property of R. J. Fair, Wallingford, Conn.

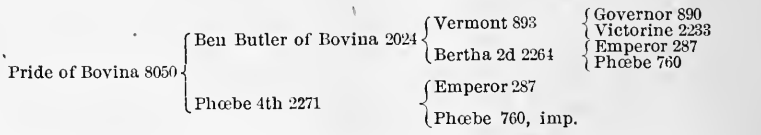


Gold Thread 4945.—Yield of butter, 16 lbs. 9 oz.; test made Jan. 14 to 21, 1881; age when made, 4 yrs. 7 mos.; property of Edward M. Burns, Middleville, N. Y.



Test included one milking on 14th and one on 20th—being seven days.

Pride of Bovina 8050.—Yield of milk, 214 lbs. 11 oz.; yield of butter, 16 lbs. 9 oz., salted 1 oz. to lb.; test made March 20 to 27, 1883; age when made, 6 yrs. 1½ mos.; property of W. L. Rutherford, Franklin, N. Y.



Feed—5 lbs. daily of ground corn and wheat bran, mixed with all the good hay she would eat.

Arawana Queen 5368.—Yield of milk, 367 lbs.; yield of butter, 16 lbs. 9 oz., salted; test made June 15 to 21, 1883; age when made, 6 yrs. 7 mos.; property of Jno. E. Phillips, Baltimore, Md.

- Arawana Queen 5368
  - Rex 1330
    - Colt Jr. 825
      - Rob Roy 17
      - Maggie 2054
    - Couch's Lily 3237
      - Albert 44
      - Lily Dale 3236
  - Arawana Rose 3810
    - Norajah 812
      - Rajah 340
      - Nora 436
    - Honeysuckle 1313
      - McClellan 4th 85
      - Mollie 1011

Daisy of Belhurst 3114.—Yield of butter, 16 lbs. 8 oz.; test made March, 1882; property of J. W. Whitenock, Dunellen, N. J.

- Daisy of Belhurst 3114
  - Graylock 740
    - Collamore's Atlantic 739, imp.
    - Undine 1864, imp.
  - Eudora 1863, imp.

Lida Mullin 9198.—Yield of milk, 269 lbs. 4 oz.; yield of butter, 16 lbs. 8 oz., salted 1 oz. to lb.; test made March 24 to 30, 1882; age when made, 2 yrs. 10 mos., property of G. R. Dykeman, Shippensburg, Pa.

- Lida Mullin 9198
  - Superb 1956
    - Pierrot 2d 1669
      - Pierrot 636
      - Dainty 796
    - Myrtle 2d 211
      - Blucher 2d 102
      - Myrtle 208
  - Lily of Maple Grove 5079
    - Isaac B. 1951
      - Matchem 447
      - Athena 2152
    - Symphonia 4635
      - Ajax 541
      - Cinderella 1428

Leonice 2d 8342.—Yield of butter, 16 lbs. 8 oz., unsalted; test made Nov. 5 to 12, 1880; age when made, 2 yrs. 5 mos.; property of P. W. Hardin, Frankfort.

- Leonice 2d 8342
  - Gil Blas 1193
    - Mogul 532, imp.
    - Cybele 136, imp.
  - Leonice 4491
    - Orange Peel 864, imp.
    - Lucie 2183, imp.

Feed—1 gal. of bran scalded, with 2 gals. of hot water; pasture, fine bluegrass.

Chrissy 1448.—Yield of butter 16 lbs. 8 oz.; test made June 21 to 27, 1878; age when made, 8 yrs. 2 mos.; property of James A. Hayt, Patterson, N. Y.

- Chrissy 1448, imp. in dam
  - Kitty Clover 1113

Lady Love 2d 2212.—Yield of butter, 16 lbs. 8 oz., salted 1 oz. to lb.; test made in May, 1883; age when made, 11 yrs. 6 mos.; property of Wm. Simpson, New York.

- Lady Love 2d 2212
  - Albert 44
    - Jerry 15, imp.
    - Frankie 17, imp.
  - Lady Love 1315
    - Malcolm 71
      - Harry 72
      - Brenda 2d 107
    - Pert 110, imp.

Feed—Ground corn and oats; pasture, very good.

Lady Bowen 354.—Yield of milk, 223 lbs.; yield of butter, 16 lbs. 8 oz., unsalted; test made May 10 to 18, 1877; age when made, 15 yrs.; property of Jas. Cloud & Son, Kennett Square, Pa.

Lady Bowen 354, imp.

Diana of St. Lambert 6636.—Yield of milk, 298 lbs.; yield of butter, 16 lbs. 8 oz., salted 1 oz. to lb.; test made June 6 to 12, 1882; age when made, 5 yrs. 2 mos.; property of W. D. Reesor, Yorkville.

- Diana of St. L. 6636
  - Stoke Pogis 3d 2238
    - Stoke Pogis 1259, imp.
    - Marjoram 3239, imp.
  - Pet of St. L. 5123
    - Lord Lisgar 1066
      - Victor Hugo 197
      - Pauline 494
    - Lucy of St. L. 5116
      - Victor Hugo 197
      - Lydie 495

Feed—"8 lbs. meal, 4 of bran, and the run of a good old pasture."

Carrie 3894.—Yield of butter, 16 lbs. 8 oz.; property of Jno. V. N. Willis, Marlborough, N. J.

- Carrie 3894
  - Sir Charles 131, imp.
  - Mary Lowndes 273, imp.

Gala 1375.—Yield of butter, 16 lbs. 7 oz.; test made July 23 to 29, 1880; age when made, 11 yrs. 6 mos.; property of Charles S. Dole, Crystal Lake, Ill.

Gala 1375, imp.

Feed—Grass alone; pasture of mixed grasses.

May Fair 5184.—Yield of milk, 171 lbs.; yield of butter, 16 lbs. 7 oz., salted; test made Sept. 21 to 27, 1883; age when made, 7 yrs.; property of Columbia Jersey Cattle Co., Columbia, Tenn.

- May Fair 5184
  - Guy Mannering 698
    - On I. of J.
    - Brunette Lass 1780
  - Miss Fair 4136
    - Guy Mannering 698
    - Lady Fair 1765

Feed—6 qts. ground oats, 4 qts. bran, daily; pasture, good timothy, orchard grass and clover.

Belle of Patterson 5664.—Yield of milk, 241 lbs. 10 oz.; yield of butter, 16 lbs. 6 oz., unsalted; test made June 5 to 11, 1882; age when made, 5 yrs. 3 mos.; property of W. J. Chinn, Frankfort, Ky.

- Belle of Patterson 5664
  - Signal 1170
    - Marius 760
      - Willie Boy 434
      - Lady Mary 1148
    - Pansy Morris 2060
      - Albert 44
      - Pansy 6th 38
  - Azelda 3872
    - Grand Duke Alexis 1040
      - On I. of J.
      - Victorine La Chaise 2740, imp.
    - Grand Duchess of St. Petersburg 2733, imp.

Feed—None. Pasture, good bluegrass. Test made about five months after calving.

Fantine 1271.—Yield of milk, 252 lbs. 4 oz.; yield of butter, 15 lbs. 6 oz., salted; age when made, 11 yrs. 5 mos.; property of H. M. Howe, Bristol, R. I.

- Fantine 1271
  - Rajah 340, imp.
  - Fancy 9, imp.

Feed—Cornmeal, ground oats, bran, pumpkins; pasture, very little.

Couch's Lily 3237.—Yield of butter, 16 lbs. 5½ oz.; test made June, 1874; age when made, 5 yrs.; property of J. O. Couch, Middlefield, Conn.

- Couch's Lily 3237
  - Albert 44
    - Jerry 15, imp.
    - Frankie 17, imp.
  - Lily Dale 3236
    - Sire bred thus; sire and dam imp. by Taintor
      - Splendid 2, imp.
      - Lewis cow No. 1, 2050
    - Bradley cow 2052

Troth (6139).—Yield of milk, 104 qts.; yield of butter, 16 lbs. 5 oz.; test made June 20 to 26, 1881, inclusive; age when made, 4 yrs.; property of T. J. Hand, Sing Sing, N. Y.

- Troth 6139
  - Hornbeam 2123
    - Marius 760
      - Willie Boy 434, imp.
      - Lady Mary 1148, imp.
    - Emily Hampton 1912
      - Southampton 117
      - Emblem 90, imp.
  - Blondette 1817, imp. June, 1871, by Capt. Pratt.

Princess of Ashantee 13467.—Yield of butter, 16 lbs. 5 oz., unsalted; test made July 2 to 8, 1883; age when made, 4 yrs.; property of S. M. Burnham, Saugatuck, Conn.

- Princess of Ashantee 13467
  - Not registered
    - Khedive P. S. 103, H. C.
      - Leo F. S. 198, H. C.
      - Coomassie F. S. 1442, H. C.
    - Rose, H. C. F. S. 1587.
  - Bessie on I. of J.

Feed—4 qts. cornmeal, 4 qts. bran; pasture, June grass, no clover.

Olies Lady Teazle 12307.—Yield of milk, 275 lbs. 4 oz.; yield of butter, 16 lbs. 5 oz., salted; test made July 1 to 8, 1883; aged when made, 3 yrs. 3 mos.; property of L. H. Smith, Lexington, Ill.

- Olies Lady Teazle 12307
  - Nero Chief 2d 4217
    - Nero Chief 2951
      - Pieriot 5th 1665
      - Mite 2751
    - Dolly Newell 4254
      - King of Fairview 778
      - Calacanthus 1620
  - Olies May Belle 6767
    - Pequaback Chief 2662
      - Wethersfield 966
      - Mary Goodenough 2068, imp.
    - Olie 4133
      - Gain Dasher 420
      - Belle 1225

No feed except bluegrass pasture.

Vieva 3d 7642.—Yield of milk, 311 lbs. 12 oz.; yield of butter, 16 lbs. 5 oz., salted; test made July 15 to 21, 1883; age when made, 4 yrs. 10 mos.; property of Jno. E. Phillips, Baltimore, Md.

- Vieva 3d 7642
  - Sidney 3262
    - Morse 847
      - Vanguard 845
      - Cowslip of Tonawanda 2116
    - Ironette 3136
      - Vanguard 845
      - Cowslip of Tonawanda 2116
  - Vieva 2117
    - Hannibal 618
    - Rose 150
      - Springvale 89
      - Violet 151

Miss Vermont (7698).—Yield of butter, 16 lbs. 5 oz.; test made Dec. 1879; age when made, 5½ yrs.; property of W. R. McCready, Saugatuck, Conn.

Miss Vermont 7698, imp. in Sept. 1878, by E. P. P. Fowler.

Flora of St. Peters 8622.—Yield of Butter, 16 lbs. 5 oz., unsalted; test made in June, 1879; age when made, 3 yrs. 5 mos.; property of Wm. Crozier, Northport.

Flora of St. Peters 8622 { Prince on I. of J. / Daisy on I. of J.

Feed—All lucern she would eat; turned to pasture at night.

Princess Sheila 7297.—Yield of milk, 213 lbs. 12 oz.; yield of butter, 16 lbs. 4½ oz., salted, 1 oz. to lb.; test made March 2 to 8, 1882; age when made, 4 yrs. 11½ mos.; property of G. R. Dykeman, Shippensburg, Pa.

Princess Sheila 7297 { Champion of America 1567 { May Boy 705 { Bismark 292 / Crocus 1787 } / Pansy 1019 { Living Storm 173 / Dolly 2d 1020 } } / Elsie Burnside 5598 { Burnside 1234 { Hughes 954 / Clematis 3174 } / Clematis 3174 { Clifton 6 / Crocus 3173 } }

St. Jeannaise 15789.—Yield of butter, 16 lbs. 4 oz., unsalted; test made July, 1883; age when made, 3 yrs. 2 mos.; property of S. W. Robbins, Wethersfield, Conn.

St. Jeannaise 15789 { Happy P. 211 J. H. B. { Vertumnus P. 161 J. H. B. { Duke 76 / Coomassie F. 1442 J. H. B. } / Garenne F. 1575 J. H. B. { Welcome F. 166 J. H. B. } } / Daisy P. S. 459 J. H. B. { Khedive P. 103 J. H. B. { Leo F. 198 J. H. B. / Coomassie F. 1442 J. H. B. } / Brown Fanny }

Favorite of the Elms 1656.—Yield of milk, 314 lbs.; yield of butter, 16 lbs. 4 oz.; test made June 5 to 12, 1876; age when made, 6 yrs.; property of Wm. S. Taylor, Burlington, N. J.

Favorite of the Elms 1656

Alfleda 6744.—Yield of milk, 250 lbs. 4 oz.; yield of butter, 16 lbs. 4 oz., salted; test made Aug. 19 to 26, 1883; age when made, 5 yrs. 7 mos.; property of Thomas Beer, Bucyrus, Ohio.

Alfleda 6744	Harpado 1859	Knave 1856	Hughes 954	
			Dusky 2525	
		Betta 3075	Lord Ogden 69	
			Bettine 3062	
	Amaranth 6200	Saugatuck 1144	Manfred 510	
			Rose Standish 1865	
		Deming's Flora 4398	Ned Booth 1508	
			Dickinson's Belle 4395	

Feed—3 qts. cornmeal and 9 of wheat bran, daily; pasture, short aftermath of clover and timothy, with green cornstalks.

Miss Willie Jones 6918.—Yield of milk, 316 lbs. 8 oz.; yield of butter, 16 lbs. 4 oz., salted; test made May 21 to 28, 1883; age when made, 7 yrs. 1 mo.; property of Wm. S. Taylor, Burlington, N. J.

Miss Willie Jones 6918	Mopsur 1165	Dolphin 2d 468	Dolphin 242 E. H. B.	
			Vanity	
		Julie Richards 1674	Barlow 2d 363	
			Lady Richards 1017	
	Bronx Read 3752	Kearsage 257	Barlow 146	
			Lady Webster 638	
		Katy Bronx 3751	Derby 253	
			Dame Katy 3750	

Feed—4 qts. cornmeal, 4 of brain, daily; good pasture.

Busy Bee 6336.—Yield of milk, 277 lbs.; yield of butter, 16 lbs. 4 oz., salted $\frac{3}{4}$ oz. to lb.; test made May 20 to 28, 1882; age when made, 4 yrs. 10 mos.; property of Wm. E. Oates, Vicksburg, Miss.

Busy Bee 6336	Top Sawyer 1404	Marius 760	Willie Boy 434	
			Lady Mary 1148	
		Emblem 90, imp.		
	Bisma 3d 1870	Fairfax 530	Monmouth 210	
			Cupid 46, imp.	
		Bisma 1669, imp.		

Feed—3 qts. boiled cottonseed, 2 qts. meal, 1 qt. shorts, twice daily; pasture, Bermuda grass and white clover.

Lady Alice of Hillcrest 7450.—Yield of butter, 16 lbs. 3 oz.; test made Dec. 25 to 31, 1882; property of James Crook, Jacksonville, Ala.

Lady Alice of Hillcrest 7450	Jeweller 1385	Mogul 532		
		Jewel Beauty 2d 1701	Lookout J. H. B. 121	
			Jewel Beauty 1668	
	Mary Ann 2d 4256	Gray Friar 567	Jupiter 93	
			Alphea 171	
		Mary Ann 2038	Roger 121	
			Sauch 235	

Phlox 16399.—Yield of milk, 175 lbs.; yield of butter, 16 lbs. 3½ oz., salted; test made Aug. 19 to 25, 1883; property of Columbia Cattle Co., Columbia, Tenn.

- Phlox 16399
  - Guy Mannering 698, imp. in dam
    - Brunette Lass 1780
  - Gazania 4513
    - Duke of Greyholdt 1035
    - Beauvine 1593

Blossie Reynolds 6082.—Yield of butter, 16 lbs. 3½ oz., salted ½ oz. to lb.; test made June 1 to 8, 1883; age when made, 6 yrs.; property of G. H. Reynolds, Canton, Penn.

- Blossie Reynolds 6082
  - Duke of Lebanon 1880
    - Iron Bank 1120
      - On I. of J.
      - Birdie 2611, imp.
    - Nancy Dawson 1279, imp.
  - Miss Vesper 4460
    - Nye 667
      - Monmouth 210
      - Niobe 99
    - Vesper 1395, imp.

Lily of Maple Grove 5079.—Yield of milk, 204 lbs. 4 oz.; yield of butter, 16 lbs. 3 oz., salted 1 oz. to lb.; test made March 13 to 19, 1882; age when made, 5 yrs. 10½ mos.; property of G. R. Dykeman, Shippensburg, Penn.

- Lily of Maple Grove 5079
  - Isaac B. 1951
    - Matchem 747
      - Mercury 432
      - Azalie 1256
    - Athena 2152
      - Clement 115, imp.
      - Minerva 341
  - Symphonia 4635
    - Ajax 541
      - Rob Roy 17
      - Beauty 804, imp.
    - Cinderella 1428
      - On I. of J.
      - Hattie 795, imp.

Willis 2d 4461.—Yield of milk, average of 24 qts.; yield of butter, 16 lbs. 3 oz.; test made Oct. 10 to 16, 1880; age when made, 5 yrs. 4 mos.; property of G. Dawson Coleman, Brickerville, Pa.

- Willis 2d 4461
  - Iron Bank 1120
    - On Island
    - Birdie 2611, imp. in Sept. 1871
  - Willis 3573
    - Clifford 286
    - Sister Dorothy 2607
      - On Island
      - Sister 1427

La Vivienne 2d 1324.—Yield of milk, 95 qts.; yield of butter, 16 lbs. 2 oz., salted; test made June 1 to 7, 1882; age when made, 12 yrs.; property of W. C. Stoughton, Riverside, Mass.

- La Vivienne 2d 1324
  - On Island
  - La Vivienne 1068, imp.

Maggie of St. Lamberts 9776.—Yield of milk, 278 lbs.; yield of butter, 16 lbs. 3 oz., salted 1 oz. to lb.; test made April 1 to 6, 1883; age when made, 4 yrs. 4 mos.; property of W. D. Reesor, Yorkville.

Maggie of St. Lamberts 9776	Stoke Pogis 3d 2238	Stoke Pogis 1259, imp.	
		Marjoram 3239, imp.	
	Ophelia 493, imp.		

Feed—8 lbs. of meal, 4 of bran, 1 peck of carrots, and what hay she would eat no pasture.

Alhena 15995.—Yield of butter, 16 lbs. 3 oz., salted; test made Jan. 1 to 7, 1883; age when made, 4 yrs. 8 mos.; property of Lyman Sperry, Watertown, Conn.

Alhena 15995	Sir Samuel Cunard 2231	Scotia 1154	Litchfield 674
			Rosebud 4th 477
		Locust 3631	Litchfield 674
			Mel 4th 128
	Daffodil of Maplewood Farm 4853	May Boy 705	Bismarck 292
			Crocus 1787
		Bessie Hurd 3099	Com. Nutt 36
			Bessie Clover 3098

Gold Trinket 9518.—Yield of milk, 240 lbs. 12 oz.; yield of butter, 16 lbs. 2 oz., unsalted; test made July 13 to 19, 1882; age when made, 3 yrs. 6 mos.; property of W. J. Chinn, Frankfort, Ky.

Gold Trinket 9518	Orange Skin 1216	Orange Peel 2d J. H. B. 36	
		Gloria 3144, imp.	
	Azelda 3872	Grand Duke Alexis 1040	On I. of J.
		Grand Duchess of St. Petersburg 2733, imp.	Victorine la Chaise 2740, imp.

Feed—1 qt. cornmeal, 1 half-gal. wheat bran, 1 pint of oilmeal, twice daily.

Fear Not 2d 6061.—Yield of milk, 216 lbs.; yield of butter, 16 lbs. 2 oz., salted; test made June 3 to 9, 1882; age when made, 6 yrs.; property of Woodside Farms Herd, Troy, N. Y.

Fear Not 2d 6061, imp.	Bobby on I. of J.		
	Fear Not 6059, imp.	Sans Peur F. S. 201 J. H. B.	Fanchon J. H. B. 1322 F. S.
		Lady of the Isles, F. S. 992, J. H. B.	Brown Prince, J. H. B. 85 F. S. H. C.
			None Such J. H. B., 334 F. S.

Feed—4 lbs. cornmeal, 6 lbs. wheat middlings; pasture.

Moth of St. Lambert 9775.—Yield of milk, 235 lbs. 8 oz.; yield of butter, 16 lbs. 2 oz., salted 1 oz. to lb.; test made June 13 to 19, 1883; age when made, 3 yrs. 10 mos.; property of Wm. Rolph, Markham, Ont.

- Moth of St. Lamberts 9775
  - Stoke Pogis 3d 2238
    - Stoke Pogis 1259, imp.
    - Marjoram 3239, imp.
  - Bessy of St. L. 5248
    - Buffer 2035
      - Lord Monck 304
      - Amelia 484, imp.
    - Maybud 5106
      - Lord Monck 304
      - Ierne 1373

Feed—1 qt. barley-meal in morning, and 3 pints at night; old pasture. The cow calved 8 mos. and 11 days before she was tested.

Corn 10504.—Yield of milk not given; yield of butter, 16 lbs. 2 oz., salted; test made June 4 to 10, 1883; age when made, 3 yrs. 8 mos.; property of J. Fisher, Urbana, O.

- Corn 10504
  - Orawapum 2833
    - Tommy Gray 1099
      - Mercury 432
      - Edith 3d 806
    - Carrie 7th 2016
      - Bashan 2d 363
      - Carrie 2d 936
  - Veronica 6684
    - Orange Bud 2978
      - Orange Skin 1216
      - Brown Gipsey 2d 5095
    - La Belle Desreau 2d 5096
      - Perseus 622
      - La Belle Desreau 3145, imp.

Feed—None; pasture, good bluegrass and white clover.

Callie Nan 7959.—Yield of milk, 252 lbs. 8 oz.; yield of butter, 16 lbs. 2 oz.; test made July 27 to Aug. 2, 1882; age when made, 4 yrs. 4 mos.; property of Campbell Brown, Spring Hill, Tenn.

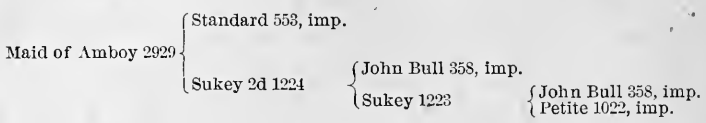
- Callie Nan 7959
  - Callis 1696
    - Don 611
      - Duke 610
      - Fawn 476
    - Calliope 1326
      - Imp. John Le Bas 398 Noble 71 J.H.B.
      - Imp. Caltha 877
  - Oonan 1485
    - Imp. Rajah 340
    - Imp. Omoo 1247

Feed—6 lbs. cornmeal, 2 lbs. wheat bran, 3 lbs. cottonseed meal, daily.

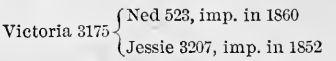
Warren's Duchess 4622.—Yield of milk, 250 lbs. 3 oz.; yield of butter, 16 lbs. 1 oz., salted; test made Aug. 20 to 26, 1882; age when made, 8 yrs. 6 mos.; property of C. Bordwell, Cambridge, Ohio.

- Warren's Duchess 4622
  - Optimus 1607
    - Sir Charles 131
    - Carrie 3894
      - Sir Charles 131
      - Mary Lowndes 273
  - Countess of Warren 3896
    - Hector 129
      - Prince Albert 149
      - Victoria 249
    - Julia 3893
      - Sir Charles 131
      - Mary Lowndes 273

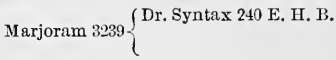
Maid of Amboy 2929.—Yield of butter, 16 lbs. 1 oz., salted; test made May 1 to May 7, 1880; property of J. W. Burke, Jacksonville, Ala.



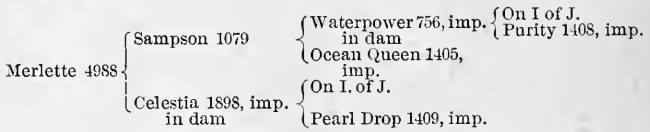
Victoria (3175).—Yield of butter, 16 lbs. 1 oz.; property of W. L. and W. Rutherford, Waddington, N. Y.



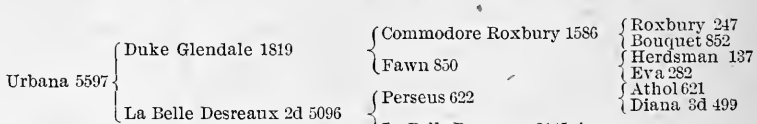
Marjoram 3239.—Yield of butter, 16 lbs.; property of T. S. Cooper, Coopersburg, Pa.



Merlette 4988.—Yield of milk, 297 lbs. 13 oz.; yield of butter, 16 lbs., salted; test made July 2 to 8, 1882; age when made, 6 yrs. 4½ mos.; property of J. D. Conner, Wabash, Ind.



Urbana 5597.—Yield of butter, 16 lbs., salted; test made June 1 to 7, 1883; age when made, 6 yrs.; property of J. C. Johnson, Marion, O.



Maid of the Elms 6960.—Yield of milk, 214 lbs. 8 oz.; yield of butter, 16 lbs., unsalted; test made evening of May 1 to morning of May 8, 1881; age when made, about 5 yrs. old — exact age not known; property of Thos. H. Malone, Nashville, Tenn.

Maid of the Elms 6960, imp. in 1878 by E. P. P. Fowler.

Wakena 19721.—Yield of milk, 314 lbs. 8 oz.; yield of butter, 16 lbs., salted; test made June 22 to 28, 1883; age when made, 3 yrs. 2 mos.; property of A. P. Foster, Plainville, Minn.

- Wakena 19721
  - Tom Brown 2d 5639
    - Tom Brown 2940
      - Ike Felch 1292
      - Flora F. 5544
    - Notre Dame 8482
      - Grand Duke 665
      - Lubie 4685
  - Gipsey Countess 9188, imp.

Dairy Pride 4th P. S. 521.—Yield of milk, 302 lbs. 4 oz.; yield of butter, 16 lbs., salted; test made May 29 to June 5, 1883; age when made, 3 yrs. 5½ mos.; property of Wm. S. Taylor, Burlington, N. J.

- Dairy Pride 4th, P. S. 521 C.
  - Victor 148, H. C.
    - Tom 77, H. C.
      - Welcome 172, H. C.
      - Belle 302, C.
    - La Petite Jaune 1065, C.
  - Dairy Pride 2d P. S. 37, H. C.
    - Orange Peel 129, H. C.
    - Dairy Pride 348, C.
      - Prince of Wales
      - Glory 61, C.

Countess 114.—Yield of butter, 16 lbs.; property of Gen. W. S. Lincoln, Worcester, Mass.

Countess 114, imp. 1851 by Thos. Motley.

Ida of Bear Lake (6169).—Yield of milk, "an average of 12 qts."; yield of butter, 16 lbs.; test made Feb. (last week in), 1881; age when made, 5 yrs.; property of Chester Bordwell, Cambridge, O.

- Ida of Bear Lake 6169
  - Prince of Warren 1512
    - Southampton 117, imp.
    - Gold Drop 222, imp.
  - Countess of Warren 3896
    - Hector 129
      - Prince Albert 119
      - Victoria 249
    - Julia 3893
      - Sir Charles 131
      - Mary Lowndes 273

"Well fed on hay, straw and different kinds of ground feed."

Dom Pedro's Julian (8631).—Yield of butter, 16 lbs.; test made Dec. 12 to 18, 1881; age when made, 4 yrs.; property of Paul Ballest, Ballietsville, Pa.

- Dom Pedro's Julian 8631
  - Dom Pedro 2092
    - Iron Bank 1120
      - On Island
      - Birdie 2611, imp.
    - Lebanon 2616
      - Orion 355
      - Sister 1427
  - Brunette Balliet 6733, imp. in 1876

Belle of Scituate 7977.—Yield of butter, 16 lbs.; property of C. O. Ellms, Scituate, Mass.

- Belle of Scituate 7977
  - Pharos 3552, imp. in 1870
  - Jersey Belle of Scituate 7828
    - Victor 3550
      - Pilot 3549
      - Minnie 7826
    - Jenny 7827
      - Victor 3550
      - Fannie 7823

Valhalla 5300.—Yield of butter, 16 lbs.; property of C. P. Markle & Sons, West Newton, Pa.

- Valhalla 5300
  - Signal 1170
    - Marius 760
      - Willie Boy 434, imp.
      - Lady Mary 1148, imp.
    - Pansy Morris 2060
      - Albert 44
      - Pansy 6th 38
  - Azelda 3872
    - Grand Duke Alexis 1040
      - On Island
      - Victorine La Chaise 2740
    - Grand Duchess of St. Peters 2733, imp. in 1871

Julia Evelyn 6007.—Yield of milk, 233 lbs. 8 oz.; yield of butter, 15 lbs. 15½ oz., unsalted; test made March 23 to 29, 1883; age when made, 6 yrs. 5 mos.; property of W. B. Montgomery, Starkville, Miss.

- Julia Evelyn 6007
  - Aldine 1136
    - Nelusko 479
      - Rajah 340
      - Nelly 55
    - Gazelle of Mobile 1735, imp.
  - Mink 2d 3890
    - Hub 1009
      - Motley 515
      - Bessie 139, imp.
    - Mink 2548
      - Magnet 968
      - Mattie Micawber 2547

Brunette Le Gros 9755.—Yield of butter, 15 lbs. 15 oz.; test made Jan., 1883; age when made, between 7 and 8 yrs.; property of S. W. Robbins, Wethersfield, Conn.

- Brunette Le Gros 9755
  - Tom P. S. 77 J. H. B.
    - Welcome 172 J. H. B.
    - Belle 302 J. H. B.
  - Daisy P. S. 92 J. H. B.

Kate Gordon 8387.—Yield of milk, 194 lbs. 7 oz.; yield of butter, 15 lbs. 15 oz., unsalted; test made May 14 to 20, 1883; age when made, 4 yrs. 6 mos.; property of M. C. Campbell, Spring Hill, Tenn.

- Kate Gordon 8387
  - Pertinax 1965
    - Pertinatti 713
      - Pilot Jr. 141
      - Pert 110
    - Roxana 1761
      - Roxbury 247
      - Cowslip 5th 849
  - Normanda 3911
    - Normandy 1046
    - Olive 4th 3018
      - Imp. Quaker 887
      - Olive 763, imp.

Nymphæa 5141.—Yield of milk, 242 lbs. 8 oz.; yield of butter, 15 lbs. 14½ oz., salted; test made Aug. 6 to 12, 1883; age when made, 7 yrs. 3 mos.; property of Wm. Simpson, New York.

Nymphæa 5141	Mercury 432	Jupiter 93	Saturn 94, imp.
			Rhea 166, imp.
		Alphea 171	Saturn 94, imp.
			Rhea 166, imp.
	Phædra 2561	Mercury 432	Jupiter 93
			Alphea 171
		Leda 799	Jupiter 93
			Europa 176

Lass of Scituate 9555.—Yield of milk, 196 lbs. 12 oz.; yield of butter, 15 lbs. 14 oz., salted; test made June, 1883; age when made, 5 yrs. 1 mo.; property of Orestes Pierce, East Baldwin, Me.

Lass of Scituate 9555	Pharos Jr. 3621	Pharos 3552, imp.	
		Blonde 378, imp.	
	Jersey Belle of Scituate 7828	Victor 3550	Pilot 3549
			Minnie 7826
		Jenny 7827	Victor 3550
			Fanny 7823, imp.

Feed—Bran, 2 qts.; cornmeal 2 qts.; cottonseed meal, 1 qt.

Oenone 8614.—Yield of milk, 185 lbs. 12 oz.; yield of butter, 15 lbs. 14 oz., unsalted; test made Oct. 10 to 17, 1883; age when made, 5 yrs. 6 mos.; property of M. M. Gardner, Nashville, Tenn.

Oenone 8614	Signal 1170	Marius 760	Willie Boy 434
			Imp. Lady May 1148
		Pansy Morris 2060	Albert 44
			Pansy 6
	Lina 2d 3082	Koba 416	Imp. Bismark 292
			Dahlia 401
		Lina 1434	Imp. Bismark 292
			Belle 1225

Nelly 2402.—Yield of butter, 15 lbs. 14 oz.; property of W. L. & W. Rutherford, Waddington, N. Y.

Nelly 2402, imp. 1868 by Thomas Motley.

Jolie of St. Lambert 5126.—Yield of milk, 298 lbs.; yield of butter, 15 lbs. 13½ oz., salted 1 oz. to lb.; test made May 2 to 8, 1883; age when made, 8 yrs. 10½ mos.; property of W. A. Reburn, Montreal, Can.

Jolie of St. Lambert 5126	Lord Lisgar 1066	Victor Hugo 197, imp.	Maggie
			On Island of J.
		Pauline 1st 494, imp.	Hebe 1st 489, imp.
	Psyche of St. L. 5121	Laval 500	Defiance 196, imp.
			Lisette 492, imp.
		Amelia 484, imp.	Jerry
			Toby

Lucy Gray 2746.—Yield of butter, 15 lbs. 13 oz., unsalted; test made June 17 to 23, 1874; property of Wm. H. Hayden, Albany, Vt.

- Lucy Gray 2746
  - Major Adams 1044
    - Duke of W. 35, imp.
    - Lavinia 1079, imp.
  - Lady Lightfoot 2745
    - Young Major 214
      - Major 75
      - Brenda 789
    - Tulip 1793, imp.

Tobira 8400.—Yield of milk, 235 lbs. 8 oz.; yield of butter, 15 lbs. 13 oz., salted; test made April 16 to 22, 1882; age when made, 3 yrs. 5 mos.; property of W. B. Montgomery, Starkville, Miss.

- Tobira 8400
  - Champion of America 1567
    - May Boy 705
      - Bismarck 292, imp.
      - Crocus 1787
    - Pansy 1019
      - Livingstorm 173
      - Dolly 2d 1020
  - Imp. Merry 4814

Lily of Burr Oaks 1101.—Yield of milk, 192 lbs. 15 oz.; yield of butter, 15 lbs. 13 oz., salted; test made Nov. 9 to 15, 1883; age when made, 3 yrs. 11 mos.; property of Mrs. John Hamilton, Farmer City, Ill.

- Lily of Burr Oaks 1101
  - Ike Felch 1292
    - Imp. Critic 540
      - Orange Peel 502, imp.
      - Imp. Camie 1359
    - Maid of Juda 2429, imp.
  - Lily Godfrey 3792
    - Mark Tapley 270
      - Imp. Sam Weller 271
      - Imp. Meg 673
    - Lady Godfrey 678
      - Dick Swiveller Jr. 276
      - Medora 679

Edwina 6713.—Yield of butter, 15 lbs. 13 oz.; test made Autumn, 1881 age when made, 4 yrs.; property of J. B. Wade, Atlanta, Ga.

- Edwina 6713
  - Signal 1170
    - Marius 760
      - Willie Boy 434
      - Lady Mary 1148
    - Pansy Morris 2060
      - Albert 44
      - Pansy 6th 38
  - Victorine La Chaise 2740, imp. in 1871

Valerie 6044.—Yield of milk, 284 lbs. 8 oz.; yield of butter, 15 lbs. 13 oz., salted; test made June 9 to 15, 1882; age when made, 5 yrs.; property of W. B. Montgomery, Starkville, Miss.

- Valerie 6044
  - Butterprint 1863
    - Nelusko 479
      - Rajah 340
      - Nelly 55
    - Mollie Horton 1734, imp.
  - Oktibeha Duchess 4422
    - Hub 1009
      - Motley 515
      - Bessie 139
    - Lucky Belle 2214
      - Albert 44
      - Pansy 6th 38

Phlox 16399.—Yield of milk, 175 lbs.; yield of butter, 15 lbs. 12½ oz., unsalted; test made Aug. 19 to 25, 1883; property of Wm. J. Webster, Columbia, Tenn.

- Phlox 16399
  - Guy Mannering 698
    - Brunette Lass 1780
  - Gazania 4513
    - Duke of Grayholdt 1085, imp.
    - Beauvine 1593, imp.

Feed—6 qts. daily of corn and oats mixed in equal parts and ground together, fed with cut hay; pasture, timothy, orchard grass and bluegrass.

Lady Bidwell 10303.—Yield of milk, 265 lbs. 4 oz.; yield of butter, 15 lbs. 12 oz., salted; test made March, 1883; age when made, 4 yrs.: property of Geo. S. Phelps, Warehouse Point, Conn.

- Lady Bidwell 10303
  - Paddy Wilson 3080
    - Burnside 2d 2838
      - Burnside 1234
      - Laurel 1973
    - Lilac Hanmer 4382
      - Burnside 1234
      - Lahelia 4379
  - Queen of Coventry 8065
    - Burnside 2d 2838
      - Burnside 1234
      - Laurel 1973
    - Ann 2d 8064
      - Lyman 793
      - Ann 1974

Feed—6 qts. wheat bran and cornmeal mixed, 10 qts. of potatoes daily; hay.

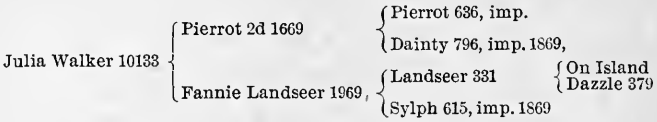
Lerna 3634.—Yield of milk, 242 lbs. 9 oz; yield of butter, 15 lbs. 12 oz., salted; test made Sept. 29 to Oct. 5, 1880; age when made, 6 yrs. 3 wks.; property of Wm. Simpson, New York.

- Lerna 3634
  - Mercury 432
    - Jupiter 93
      - Saturn 94, imp.
      - Rhea 166, imp.
    - Alphea 171
      - Saturn 94, imp.
      - Rhea 166, imp.
  - Gussie Richards 1673
    - Admiral 372
      - Saturn 94, imp.
      - Bronx 306, imp.
    - Lady Richards 1017
      - John Bull 358, imp.
      - Lady Webster 638, imp.

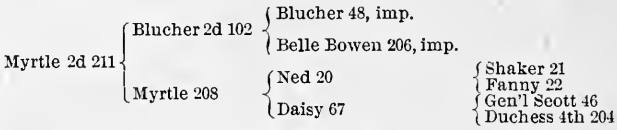
Fanny Taylor 6714.—Yield of milk, 223 lbs.; yield of butter, 15 lbs. 12 oz., unsalted; test made Dec. 28 to Jan. 3, 1883; age when made, 5 yrs. 8 mos.; property of Jno. Middleton, Shelbyville, Ky.

- Fanny Taylor 6714
  - Signal 1170
    - Marius 760
      - Willie Boy 434, imp.
      - Lady Mary 1148, imp.
    - Pansy Morris 2060
      - Allert 44
      - Pansy 6th 38
  - Bonanza 3965
    - Pierrot 636, imp.
    - Frolic, imp.

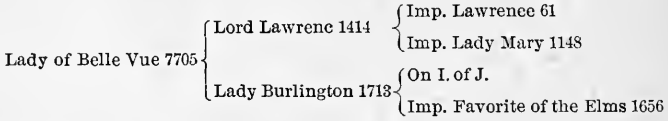
Julia Walker 10133.—Yield of butter, 15 lbs. 12 oz.; test made June, 1880; age when made, 5 yrs.; property of Thos. Fitch, New London, Conn.



Myrtle 2d 211.—Yield of butter, 15 lbs. 12 oz.; test made July 1 to 8, 1875; age when made, 6 yrs.; property of Thos. Fitch, New London, Conn.

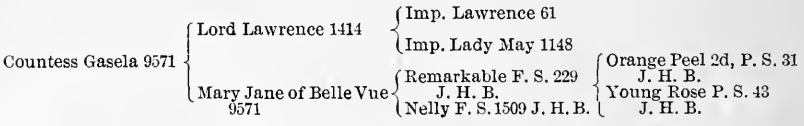


Lady of Bellevue 7705.—Yield of milk, 169 lbs. 8 oz.; yield of butter, 15 lbs. 11 oz., unsalted; test made Nov. 19 to 26, 1883; age when made, 5 yrs. 4 mos.; property of M. M. Gardner, Nashville, Tenn.


Lady of Belle Vue 7705
Lord Lawrenc 1414
Imp. Lawrence 61
Imp. Lady Mary 1148
Lady Burlington 1713
On I. of J.
Imp. Favorite of the Elms 1656

Feed—5 qts. cornmeal, 6 qts. ground oats, 4 gals. cut up sheaf oats; pasture, bluegrass, very poor.

Countess of Gasela 9571.—Yield of milk, 213 lbs. 10 oz.; yield of butter, 15 lbs. 11 oz., unsalted; test made Oct. 17 to 31, 1883; age when made, 4 yrs. 6 mos.; property of M. M. Gardner, Nashville, Tenn.


Countess Gasela 9571
Lord Lawrence 1414
Imp. Lawrence 61
Imp. Lady May 1148
Mary Jane of Belle Vue 9571
Remarkable F. S. 229 J. H. B.
Nelly F. S. 1509 J. H. B.
Orange Peel 2d, P. S. 31 J. H. B.
Young Rose P. S. 43 J. H. B.

Feed—4 qts. cornmeal, 4 qts. ground oats, 4 gals. cut up sheaf oats, daily; pasture, short orchard and bluegrass.

Duchess of St. Lambert 5111.—Yield of milk, 216 lbs.; yield of butter, 15 lbs. 11 oz.; test made Dec. 19 to 26, 1883; age when made, 8 yrs.; property of V. E. Fuller, Hamilton, Ont.

- Duchess of St. Lambert 5111
  - Lord Lisgar 1166
    - Victor Hugo 197
    - Pauline 494
  - Pride of Windsor 483, imp. from the Queen's Shaw Farm.

Princess Bellworth 6801.—Yield of milk, 256 lbs. 4 oz.; yield of butter, 15 lbs. 10½ oz., salted; test made June 16 to 22, 1883; age when made, 5 yrs. 6 mos.; property of Jno. E. Phillips, Baltimore, Md.

- Princess Bellworth 6801
  - Rex 1330
    - Colt Jr. 825
      - Rob Roy 17
      - Maggie 2054
    - Couch's Lily 3237
      - Albert 44
      - Lily Dale 3236
  - Belle of Middlefield 1516
    - King Harold 344
    - Mabel 1092
      - Earl 81
      - Maia 1093

Fancy Juno 6086.—Yield of butter, 15 lbs. 10 oz., salted; test made Nov. 29 to Dec. 6, 1883; age when made, 6 yrs. 5 mos.; property of R. S. Strader, Lexington, Ky.

- Fancy Juno 6086
  - Red Cloud 2d 2260
    - Red Cloud 529, imp.
      - On I. of J.
      - Corona 1159, imp.
    - Famosa 1364
      - Jerry 2d 513
      - Meg 563, imp.
  - Fancy Fair 2858
    - Prize Duke 942
      - Olive 319
      - Jersey Prize 1267, imp.
    - Imp. Le Gallais' Fancy 1265

Lucilla Kent 8892, imp.—Yield of milk, 149 lbs. 8 oz.; yield of butter, 15 lbs. 10 oz., unsalted, 16 lbs. 6 oz. salted; test made March 7 to 13, 1883; age when made, 7 yrs.; property of V. E. Fuller, Hamilton, Ont.

- Lucilla Kent 8892, imp.
  - Conqueror 89, P. S. H. C.
    - Welcome 166, P. S. H. C.
    - Princess 769, F. S. H. C.
  - Bessie 232, P. S. C.
    - Sans Peur 201, F. S. H. C.
    - L'Echo 1230, F. S. C.

Silenta 17685.—Yield of butter, 15 lbs. 10 oz.; test made Aug. 12 to 18, 1883; age when made, 6 yrs. 2 mos.; property of Chas. W. Beardsley, Milford, Conn.

- Silenta 17685
  - Oxoli 1922
    - St. Helier 45, imp.
    - Pyrola 4506
      - St. Helier 45, imp.
      - Ianthe 4562
  - Lara 4306
    - Arab 245
      - Nimrod 2d 246
      - Garland 857
    - Effie 523
      - Commodore 56
      - Countless 897

Brunette Lass 1780.—Yield of butter, 15 lbs. 10 oz.; age when made, 10 yrs.; property of W. J. Webster, Columbia, Tenn.

Brunette Lass 1780, imp. by E. P. P. Fowler.

Chenda 4599.—Yield of milk, 284 lbs.; yield of butter, 15 lbs. 9½ oz.; test made June 13 to 19, 1882; age when made, 6 yrs. 6 mos.; property of Campbell Brown, Spring Hill, Tenn.

- Chenda 4599
  - Marius 760
    - Willie Boy 434
      - On I. of J.
      - Imp. Lady Mary 1148
    - Imp. Lady Mary 1148
  - Chatelaine 1916
    - Tancred 501
      - On I. of J.
      - Imp. Velvet 294
    - Imp. Lady Ella 1146

Vaniah 6597.—Yield of milk, 216 lbs. 4 oz.; yield of butter, 15 lbs. 9½ oz.; test made Jan. 28 to Feb. 3, 1883; property of T. F. Shotwell, Bucyrus, O.

- Vaniah 6597
  - Iron Bank 1120, imp. in dam
    - On I. of J.
    - Birdie 2611
  - Matchless 1277, imp.

Kitty Colt 2213.—Yield of milk, 214 lbs. 8 oz.; yield of butter, 15 lbs. 9½ oz., salted; test made May 16 to 22, 1883; age when made, 11 yrs. 5½ mos.; property of W. B. Montgomery, Starkville, Miss.

- Kitty Colt 2213
  - Albert 44
    - Jerry 15, imp.
    - Frankie 17, imp.
  - Kitty Lightfoot 2d 1300, imp.
    - Kitty Lightfoot 835, imp.

Lily Darling 11713.—Yield of milk, 197 lbs. 8 oz.; yield of butter, 15 lbs. 9 oz., salted; test made Aug. 30 to Sept. 5, 1883; age when made, 5 yrs. 7 mos.; property of A. C. Jennings, Urbana, Ohio.

Lily Darling 11713, imp.

Feed—12 qts. ground corn and oats, one-third corn and two-thirds oats; no pasture.

Idalene 11841.—Yield of milk, 234 lbs. 4 oz.; yield of butter, 15 lbs. 8½ oz., salted; test made Aug. 6 to 12, 1883; age when made, 4 yrs. 10 mos.; property of Wm. Simpson, New York.

- Idalene 11841
  - Cecco 1673
    - Mercury 432
      - Jupiter 93
      - Alphea 171
    - Ceres 427, imp.
  - Tyca 4559
    - Mercury 432
      - Jupiter 93
      - Alphea 171
    - Hybla 2991
      - Dolphin 2d 468, imp.
      - Julia Richards 1674

Lustre (2062).—Yield of milk, 286 lbs.; yield of butter, 15 lbs. 8½ oz.; test made June 12 to 18, 1876; age when made, 4 yrs.; property of C. S. Dole, Crystal Lake, Ill.

- Lustre 2062
  - Orange Peel 502
    - Clement on Island
    - Cowslip on Island
  - Locket 560
    - On Island
    - Laura 559, imp. 1868

Test made without feed; pasturage of mixed grasses.

Duchess Caroline 3d 6041.—Yield of milk, 224 lbs.; yield of butter, 15 lbs. 8 oz., unsalted: test made April 9 to 15, 1883; age when made, 6 yrs. 2 mos.; property of W. B. Montgomery, Starkville, Miss.

- Duchess Caroline 3d 6041
  - Aldine 1136
    - Nelusko 479
      - Rajah 340
      - Nelly 55
    - Gazelle of Mobile 1735
  - Duchess Caroline 2022
    - Hero 840
      - J. P. Cushing's bull
      - Flora 2018
    - Caroline 2d 2019
      - On I. of J.
      - Imp. Caroline

Niva 7523.—Yield of milk, 201 lbs. 7 oz.; yield of butter, 15 lbs. 8 oz., salted; test made April 14 to 20, 1880; age when made, 4 yrs. 9 mos.; property of C. A. Keefer, Sterling, Ill.

- Niva 7523
  - Caen 2317
    - Alpheus 1168
      - Mercury 432
      - Europa 176
    - Countess of Normandy 267
      - On I. of J.
      - Young Pansy 2479, imp.
  - Countess Gisela 2820
    - Scrooge 369
      - Sam Weller 271, imp.
      - Susie 959, imp.
    - Gazelle 996
      - Diogenes 277
      - Countess 3d 990

La Belle Petite 5472.—Yield of butter, 15 lbs. 8 oz., salted 1 oz. to lb.; test made in June, 1881; age when made, 5 yrs.; property of Cooper & Maddux, Reading, Ohio.

- La Belle Petite 5472
  - Stoke Pogis 3d 2238
    - Stoke Pogis 1259, imp.
      - Young Rioter 751 E. H. B.
      - Essay
    - Marjoram 3239, imp.
      - Dr. Syntax 240 E. H. B.
      - Magnet
  - La Petite Mere 5470
    - Stoke Pogis 1259, imp.
      - Young Rioter 751 E. H. B.
      - Essay
    - Violet 3d 3240, imp.
      - Bustler 137 E. H. B.
      - Violetta

Daisey 2d 15761.—Yield of milk, 231½ lbs.; yield of butter, 15 lbs. 8 oz., salted; test made July 19 to 26, 1883; age when made, 7 yrs.; property of J. E. Gillingham, Villa Nova, Pa.

- Daisey 2d 15761
  - Bee's Wing 59, P. S. J. H. B.
  - Daisey 1260, P. S. J. H. B.

Palestina 4644.—Yield of butter, 15 lbs. 8 oz., salted; test made April 30 to May 7, 1883; age when made, 8 yrs. 1 mo.; property of A. F. Mullin, Mt. Holly Springs, Pa.

- Palestina 4644
  - Pierrot 2d 1669
    - Pierrot 636, imp.
    - Dainty 796, imp.
  - Palestine 3d 1104
    - Gen. Scott 46
      - Splendid 2, imp.
      - Sue 2d 65
    - Palestine 26, imp.

Feed—Two qts. meal—half corn and half oats—2 qts. wheat bran and 1 qt. oil meal, twice daily; hay first half of week and green rye second. The change to rye seemed to decrease the butter.

Etiquette 4300.—Yield of butter, 15 lbs. 8 oz.; property of Orestes Pierce, East Baldwin, Maine.

- Etiquette 4300
  - Hamilton 1074
    - Marius 760
      - Willie Boy 434
      - Lady Mary 1148
    - Emily Hampton 1912
      - Southampton 117
      - Emblem 90
  - Esther 889
    - Kaulbach 185
      - Uncle Pete No. 2, 186
      - Katy Darling No. 2, 435
    - Edith 447
      - Comet 130
      - Jura 224

Violet 3d 3240.—Yield of butter, 15 lbs. 8 oz.; property of T. S. Cooper, Coopersburg, Pa.

- Violet 3d 3240, imp.

Jeanne Le Bas (2476).—Yield of butter, 15 lbs. 8 oz.; property of Mr. H. Bordin-Bowen.

- Jeanne Le Bas 2476
  - Noble (Island Herd Book 71)
  - Daisy Pride (Island Herd Book 348)

My Queen 12614.—Yield of butter, 15 lbs. 8 oz.; property of Jno. V. N. Willis, Malborough, N. J.

- My Queen 12614
  - Young Duke 138
    - Malcom 71
      - Harry 72
      - Brenda 2d 107
    - Duchess 101, imp, 1868
  - Carrie 3894
    - Sir Charles 131, imp. 1860
    - May Lowndes 273, imp. 1860

Orphean 4636.—Yield of milk, 83 qts. ¾ pts.; yield of butter, 15 lbs. 7 oz., salted; test made Nov. 6 to 13, 1883; age when made, 8 yrs. 6 mos.; property of S. W. Sterrett, Barnitz, Pa.

- Orphean 4636
  - Hurd's Ivanhoe 1522
    - Zany 551
      - Lopez 313
      - Pet 2d 747
    - Blooming Beauty 2584
      - Bill Jr. 182
      - Fanny 2583
  - Hurd's Orpha 3346
    - May Boy 705
      - Bismark 292
      - Crocus 1787
    - Kizzie 3344
      - Tom Dasher 420
      - E. Colt's Daisy No. 2, 3343

Copper 1979.—Yield of butter, 15 lbs. 7 oz., salted; test made June 6 to 13, 1878; age when made, 8 yrs.; property of Miller Kitchum, Westport, Ct.

- Copper 1979
  - Hockanum 792
    - Blucher 48, imp.
    - Dewdrop 1158, imp.
  - Rose 3d, 913
    - Splendid 2, imp.
    - Rose 2d, 913
      - Jersey 9, imp.
      - Rose 240, imp.

Crust 4775.—Yield of butter, 15 lbs. 7 oz., salted; test made Feb. 8 to 14, 1883; age when made, 6 yrs. 10½ mos.; property of Jas. B. Wilder.

- Crust 4775
  - Alpheus 1168
    - Mercury 432
      - Jupiter 93
      - Alphea 171
    - Europa 176
      - Jupiter 93
      - Alphea 171
  - Countess of Windsor 2024, imp.

Jersey 3260.—Yield of milk, 212 lbs.; yield of butter, 15 lbs. 6 oz., salted; test made Oct. 29 to Nov. 4, 1882; age when made, 18 yrs. 6 mos.; property of Woodside Farm Herd, Troy, N. Y.

- Jersey 3260
  - Dick Swiveller Jr. 276
    - Dick Swiveller 74
      - Major 75
      - Flora 113, imp.
    - Twilight, imp.
  - High Life 3259
    - Sailor 69, imp.
    - Duchess 548, imp.

Annie Smith 10324.—Yield of milk, 278 lbs. 4 oz.; yield of butter, 15 lbs. 6 oz., unsalted; test made Jan. 24 to 31, 1882; property of A. B. Darling, Ramseys, New Jersey.

- Annie Smith 10324
  - Smith of Darlington 2458
    - On I. of J.
    - Premium of Darlington 5572, imp.
  - Violet of Darlington 5573, imp.

Feed—3 qts. corn, 3 qts. oats daily.

Enigma 5360.—Yield of milk, 234 lbs. 4 oz.; yield of butter, 15 lbs. 6 oz., unsalted; test made March 19 to 25, 1880; age when made, 6 yrs.; property of Edwin Thorne, Millbrook, N. Y.

- Enigma 5360
  - St. Martin 1482
    - On Island
    - Imp. in Dam Beauty 5311
  - Little Emily 5356
    - Frank Warren 1490
      - Gen'l Warren 1489
      - Cowslip 3706
    - Emily W. 5355, imp. 1870

Witch Hazel 4th 6131.—Yield of milk, 260 lbs. 8 oz.; yield of butter, 15 lbs. 5½ oz.; test made May 28 to June 3, 1882; age when made, 5 yrs. 6 mos.; property of Campbell Brown, Spring Hill, Tenn.

- Witch Hazel 4th 6131
  - Lord Lawrence 1414
    - Imp. Lawrence 61 A. J. C. C., J. H. B. 84 F. S.
    - Imp. Lady Mary 1148
  - Witch Hazel 1360
    - Imp. Southampton 117
    - Imp. Hazel 91
      - Imp. Clement 115 A. J. C. C. F. S. 61, J. H. B.
      - Imp. Lady Bird 221, A. J. C. C. J. H. B. 92

Alphea 171.—Yield of butter, 15 lbs. 6 oz.; property of R. M. Hoe, New York, N. Y.

Alphea 171 { Saturn 94, imp. 1861 / Rhea 166, imp. 1861

Romp Ogden 2d 4764.—Yield of milk, 265½ lbs.; yield of butter, 15 lbs. 5 oz., salted ¾ oz. to lb.; test made May 20 to 26, 1882; age when made, 6 yrs. 3 mos.; property of Wm. E. Oates, Vicksburg, Miss.

Romp Ogden 2d 4764 { Pertinatti 713 { Pilot Jr. 141 { Pilot 3, imp. / Jennie 278, imp. } / Pert 110, imp. } / Romp Ogden 1571 { Oakland 33 { Com. Nut 36 / Cowslip 43 } / Buttercup 3d 1099 { McClelland 25 / Buttercup 2d 1100 } }

Zalma 8778.—Yield of milk, 221 lbs. 8 oz.; yield of butter, 15 lbs. 5 oz. salted; test made Feb. 15 to 21, 1883; age when made, 4 yrs. 11 mos., property of Wm. Simpson, New York.

Zalma 8778 { Mercury 432 { Jupiter 93 { Saturn 94, imp. / Rhea 166, imp. } / Alphea 171 { Saturn 94, imp. / Rhea 166, imp. } } / Hybla 2991 { Dolphin 2d 468, imp. / Julie Richards 1674 { Bashan 2d 363 / Lady Richards 1017 } } }

Feed.—Corn and oats ground together, a little oilmeal, best clover hay, some roots; no pasture.

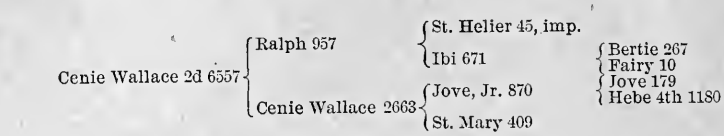
Arawana Buttercup 6052.—Yield of milk, 343 lbs.; yield of butter, 15 lbs. 5 oz.; test made May 15 to 21, 1881; age when made, 4 yrs.; property of T. Alex Seth, Baltimore, Md.

Arawana Buttercup 6052 { Norajah 812 { Rajah 340, imp. 1869 / Nora 434 { Sam Weller 40 / Nelly 55 } } / Coe's Stella 3930 { Colt Jr. 825 { Rob Roy 17 / Maggie 2054 } / Prize 1967 { King Harold 344 / Snow Flakes 1004 } } }

Victory 16379, imp.—Yield of milk, 277 lbs.; yield of butter, 15 lbs. 4½ oz., unsalted; test made April 16 to 23, 1883; age when made, 5 yrs.; property of V. E. Fuller, Hamilton, Ont.

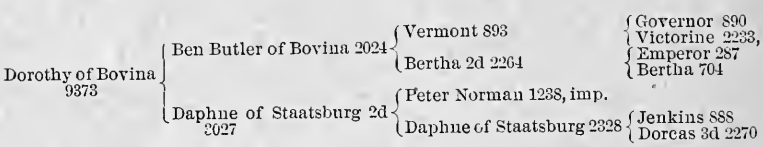
Victory 16379, A. J. C. C. 1999 F. S. J. H. B., imp.

Cenie Wallace 2d 6557.—Yield of milk, 239 lbs.; yield of butter, 15 lbs. 4½ oz., salted; test made May 16 to 22, 1882; age when made, 4 yrs. 7 mos.; property of W. B. Montgomery, Starkville, Miss.



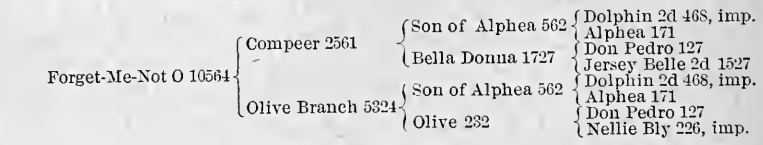
Feed—Thrice daily; bran, cornmeal, cottonseed; pasture, good.

Dorothy of Bovina 9373.—Yield of milk, 205 lbs.; yield of butter, 15 lbs. 4 oz., salted 1 oz. to lb.; test made June 20 to 26, 1883; age when made, 5 yrs. 3½ mos.; property of W. L. Rutherford, Franklin, N. Y.

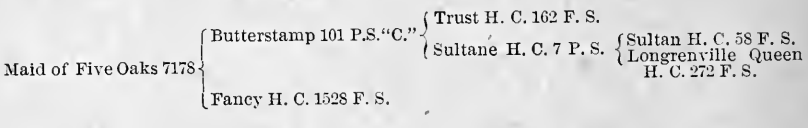


Feed—None; pasture, rather poor.

Forget-Me-Not O 10564.—Yield of milk, 220 lbs. 8 oz.; yield of butter, 15 lbs. 4 oz., salted; test made June 21 to 27, 1883; age when made, 3 yrs. 8 mos.; property of G. H. & H. A. Grinnell, Jefferson, Iowa.



Maid of Five Oaks 7178.—Yield of milk, 273 lbs. 9 oz.; yield of butter, 15 lbs. 4 oz., salted ½ oz. to lb.; test made May 7 to 13, 1883; age when made, 7 years; property of Houghton Farm, Mountainville, N. Y.


Maid of Five Oaks 7178
Butterstamp 101 P.S."C."
Trust H. C. 162 F. S.
Sultane H. C. 7 P. S.
Sultan H. C. 58 F. S.
Longrenville Queen H. C. 272 F. S.
Fancy H. C. 1528 F. S.

Merry Burlington 7600.—Yield of milk, 256 lbs.; yield of butter, 15 lbs. 4 oz., salted; test made May 22 to June 2, 1883; age when made, 5 yrs. 8 mos.; property of J. T. & W. S. Shields, Beans Station, Tenn.

Merry Burlington 7600	Merry Andrew 719	Monarch of Roxbury 499	John Le Bas 398
			Nellie 289
		Mirth 92	Hartford 52
			Motto 80
	Lady Burlington 2d 4032	Mogul 532, imp.	
		Lady Burlington 1713 imp. in dam	Favorite of the Elms 1656

Feed—12 lbs. of cornmeal and 3 of cottonseed meal per day; pasture, orchard grass and white clover.

Purest 13730.—Yield of milk, 206 lbs. 14 oz.; yield of butter, 15 lbs. 4 oz., salted; test made July 2 to 8, 1883; age when made, 2 yrs. 2 wks.; property of Wm. Simpson, New York.

Purest 13730	Mercury 432	Jupiter 93	Saturn 94, imp.
			Rhea 166, imp.
		Alphea 171	Saturn 94, imp.
			Rhea 166, imp.
	Nymphæa 5141	Mercury 432	Jupiter 93
			Alphea 171
		Phædra 2561	Mercury 432
			Leda 799

Feed—Corn and oats ground together; bran mashes; pasture, extra good white clover.

Cowslip 5th 849.—Yield of butter, 15 lbs. 4 oz.; property of Dr. L. H. Twaddell, W. Philadelphia, Pa.

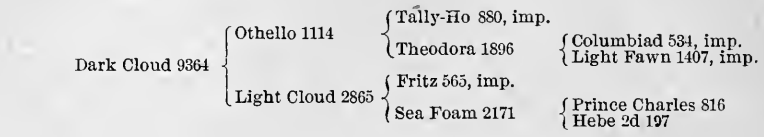
Cowslip 5th 849	Patterson 11	St. Clement 10, imp. 1856	
		Dam imp. from Island by R. L. Colt	
	Cowslip 893	Jersey 9	On Island
			Daisy 241
		Phœbe 2d 902	Taintor 70
			Phœbe 106

Nazli 10327.—Yield of milk, 232 lbs. 8 oz.; yield of butter, 15 lbs. 3½ oz., unsalted; test made April 29 to May 5, 1883; age when made, 4 yrs.; property of A. B. Darling, Ramseys, N. J.

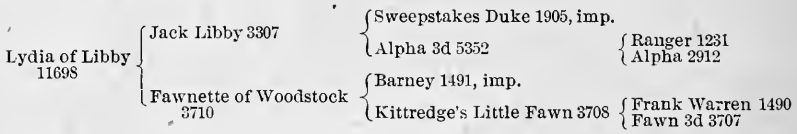
Nazli 10327	Duke of D. 2460	Sarpedon 930	Mercury 432
			Europa 176
		Eurotas 2454	Rioter 2d 469
			Europa 176
	Grace D. 5574	Clement on I. of J.	
		Violet of D. 5573	

Feed—6 qts. corn, oats and bran; two of each.

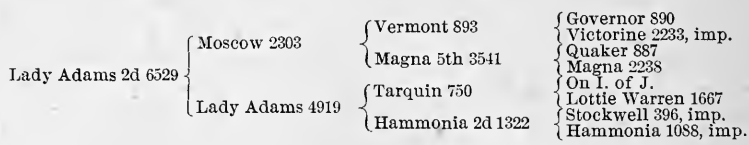
Dark Cloud 9364.—Yield of milk, 256 lbs. 2 oz.; yield of butter, 15 lbs. 3½ oz., salted 1 oz. to lb.; test made Aug. 14 to 21, 1883; age when made, 6 yrs. 4 mos.; property of J. S. Rogers, Paterson, N. J.



Lydia Libby 11698.—Yield of milk, 266 lbs. 4 oz.; yield of butter, 15 lbs. 3¼oz., salted; test made June 16 to 22, 1883; age when made, 4 yrs. 1 mo.; property of Jno. E. Phillips, Baltimore, Md.

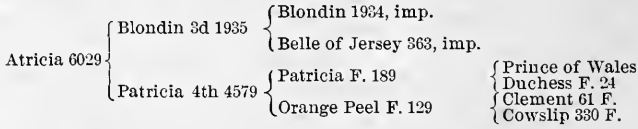


Lady Adams 2d 6529.—Yield of butter, 15 lbs. 3 oz., unsalted; test made June 2 to 8, 1883; age when made, 5 yrs. 6 mos.; property of W. B. Dinsmore, Staatsburg, N. Y.



Feed—4 qts. cornmeal, oatmeal and wheatbran mixed; pasture good.

Atricia 6029.—Yield of butter, 15 lbs. 3 oz., salted; test made April 30 to May 6, 1882; age when made, 5 yrs. 22 days; property of H. G. Westlake, Hillsdale, Miss.



Feed—2 qts. cornmeal, 4 qts. wheatbran, 8 qts. oats, hay.

Fragrance 4059.—Yield of butter, 15 lbs. 3 oz., salted 1 oz. to lb.; test made Feb. 5 to 11, 1883; age when made, 10 yrs.; property of Wm. Simpson, New York.

- Fragrance 4059
  - Albert 44
    - Jerry 15, imp.
    - Frankie 17, imp.
  - Morning Glory 2d 1299, imp.
    - On I. of J.
    - Morning Glory 908, imp.

Nelida 2d 8227.—Yield of milk, 262 lbs. 2 oz.; yield of butter, 15 lbs. 2½ oz.; test made April 11 to 17, 1882; age when made, 3 yrs. 7 mos.; property of D. A. Givens, Cynthiana, Ky.

- Nelida 2d 8227
  - Beauclerc 1882
    - Scion 1033
      - Red Knight 666
      - Cybele 3d 1270
    - Niobe 99
  - Nelida 5346
    - Hampton Duke 1355
      - Orange Peel 864
      - Browney 2184
    - Niobe 2d 514
      - Lord Derby 203
      - Niobe 99

Iola 4627.—Yield of milk, 232 lbs. 10 oz.; yield of butter, 15 lbs. 2½ oz., salted; test made Oct. 20 to 26, 1882; age when made, 7 yrs. 2 mos.; property of Wm. Simpson, New York.

- Iola 4627
  - Mercury 432
    - Jupiter 93
      - Saturn 94, imp.
      - Rhea 166, imp.
    - Alphea 171
      - Saturn 94, imp.
      - Rhea 166, imp.
  - Gussie Richards 1673
    - Admiral 372
      - Saturn 94, imp.
      - Bronx 306, imp.
    - Lady Richards 1017
      - John Bull 358, imp.
      - Lady Webster 638, imp.

Arawana Poppy 6053.—Yield of milk, 236 lbs. 8 oz.; yield of butter, 15 lbs. 2 oz., unsalted; test made May 30 to June 5, 1883; age when made, 5 yrs. 10 mos. 22 days; property of Watts & Seth, Baltimore, Md.

- Arawana Poppy 6053
  - Norajah 812
    - Rajah 340, imp.
    - Nora 434
      - Sam Weller 40
      - Nelly 55
  - Poppy 4842
    - Matley 515
      - Jack Horner 514
      - Meg Merrilies 1372
    - Countess 3d 990
      - Dick Swiveller 74
      - Countess 2d 991

Feed—1 qt. cornmeal, 2 qts. bran, twice daily, with green rye and pasture.

Pet of Maplewood Farm 4854.—Yield of milk, 259 lbs. 12 oz.; yield of butter, 15 lbs. 2 oz., salted; test made May 28 to June 3, 1883; property of L. M. Fair, Wallingford, Conn.

- Pet of Maplewood Farm 4854
  - Victor 797, imp.
  - Margaretta 1994, imp.

Bessie Bradford 2d 7271.—Yield of butter, 15 lbs. 2 oz.; test made last week in June, 1883; age when made, 6 yrs. 6 mos.; property of Alice M. Bradford, West Chester, N. Y.

- Bessie Bradford 2d 7271
  - Bluctooth 1821
    - St. Helier 45
    - Silene 4307
      - St. Helier 45
      - Lava 4306
  - Bessie Bradford 7269
    - King Pin 1878
      - Mercury 432
      - Edna 3d 668
    - Edith 4th 817
      - Mars 95
      - Edith 3d 806

Lady Oaks 2d 5246.—Yield of butter, 15 lbs. 2 oz., salted; test made May 18 to 24, 1881; age when made, 6 yrs. 6 mos.; property of John E. Phillips, Baltimore, Md.

- Lady Oaks 2d 5246
  - Baltimore Boy 837
    - On I. of J.
    - Violet 2080, imp.
  - Lady Oaks 2081
    - On I. of J.
    - La Crême 2082, imp.

Feed—Two qts. cornmeal, 2 qts. wheat middlings; pasture, good clover and orchard grass.

Queen of Ashantee 14554.—Yield of milk, 116 lbs.; yield of butter, 15 lbs. 2 oz., unsalted; test made June 25 to July 2, 1883; age when made, 4 yrs. 4 mos.; property of S. M. Burnham.

- Queen of Ashantee 14554.
  - Guy Fawkes F. S. 251 H. C.
    - Koffee 233 F. S. H. C.
      - Nonpareil P. S. 37 H. C.
      - Coomassie 1442 F. S.
    - Angelica F. S. 1738 H. C.
  - Gros Puits 1454 F. S. H. C.
    - Brown Prince 85 F. S. H. C.
      - Prince of Wales 115 F. S. H. C.
    - St. Jeannaise F. S. 1452.

Feed—4 qts. cornmeal, 4 qts. bran, daily; pasture, red top and June grass.

Naomie's Pride 16745.—Yield of milk, 190 lbs. 4 oz.; yield of butter, 15 lbs. 2 oz., salted; test made Aug. 30 to Sept. 5, 1883; age when made, 3 yrs. 3 mos.; property of A. C. Jennings, Urbana, O.

Naomie's Pride 16745	Ridgely of Hampton 5046	Orange Skin 1216	Orange Peel 2d 36 J. H. B.	
			Gloria 3144, imp.	
		Button 2d 3160	Sam 402	
			Button 953	
	Naomie Ronsby 16742	Orange Skin 1216	Orange Peel 2d 36 J. H. B., H. C.	
			Gloria 3144, imp.	
		Ronsby 6787	Actæon 914	
			Belle Fowler 2437	

Azelda 2d 7022.—Yield of milk, 216 lbs. 5 oz.; yield of butter, 15 lbs. 2 oz., salted; test made April 7 to 13, 1883; age when made, 4 yrs. 11 mos.; property of Wm. Craik, Frankfort, Ky.

Azelda 2d 7022	Monsieur 1723	Vespucius 758	On I. of J.
			Vesper Lass 1784
		Madame 1812	Tip 366
			Maiden 1464
	Azelda 3872	Grand Duke Alexis 1040	On I. of J.
			Victorine La Chaise 2740
		Grand Duchess of St. Petersburg 2733.	

Aleph Judea 11389.—Yield of milk, 241 lbs. 8 oz.; yield of butter, 15 lbs. $1\frac{3}{4}$ oz., salted; test made Nov. 13 to 19, 1883; age when made, 3 yrs. 10 mos.; property of S. M. Neel, Shelbyville, Ky.

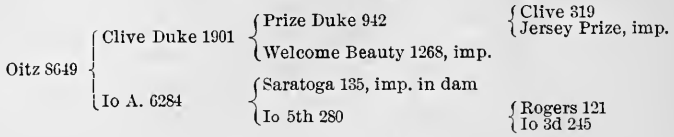
Aleph Judea 11389	John Knox 3289	Red Cloud 2d 2260	Red Cloud 529	
			Formosa 1364	
		Lady Pigot 2d 5798 imp. in dam	Lady Pigot 5797	
	Julie of St. Lambert 5483	Buffer 2055	Lord Monck 304	
			Amelia 484	
		Rosette of St. Lambert 5708	Lord Lisgar 1066	
			Victoria 411	

Aldarine 5301.—Yield of milk, 232 lbs. 15 oz.; yield of butter, 15 lbs. $1\frac{1}{2}$ oz., unsalted; test made May 28 to June 3, 1882; age when made, 6 yrs. 3 mos.; property of W. J. Chinn, Frankfort, Ky.

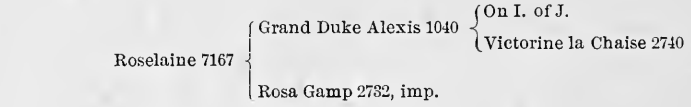
Aldarine 5301	Signal 1173	Marius 760	Willie Boy 434	
			Lady Mary 1140	
		Pansy Morris 2060	Albert 44	
			Pansy 6th 38	
	Alda 3872	Grand Duke Alexis 1040	On I. of J.	
			Victorine La Chaise 2743	
		Archie 1112, imp.		

No feed; pasture, good bluegrass.

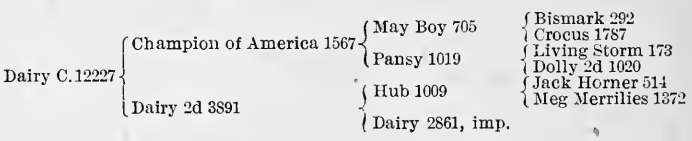
Oitz 8649.—Yield of milk, 293 lbs. 1 oz.; yield of butter, 15 lbs. 1 oz., unsalted; test made June 10 to 18, 1882; age when made, 4 yrs.; property of Dr. J. S. Earhart, Mulberry, Ind.



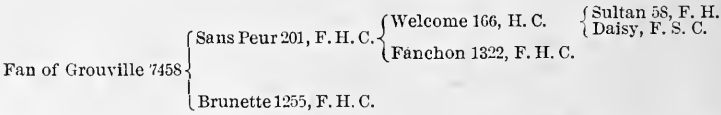
Roselaine 7167.—Yield of butter, 15 lbs. 1 oz., salted; test made Dec. 5 to 11, 1883; age when made, 5 yrs. 8 mos.; property of Garrettson Bros., Pendleton, Ind.



Dairy C. 12227.—Yield of milk, 217 lbs.; yield of butter, 15 lbs. ½ oz., unsalted; test made April 25 to May 1, 1883; age when made, 2 yrs. 9 mos.; property of W. B. Montgomery, Starkville, Miss.



Fan of Groville 7458.—Yield of milk, 263 lbs. 12 oz.; yield of butter, 15 lbs., unsalted; test made June 11 to 17, 1883; age when made, 8 yrs. 4 mos.; property of Beech Grove Farm, Beech Grove, Ind.



Feed.—Three qts. ground oats and bran, in equal parts, thrice daily; pasture, good clover and timothy.

Forsaken 7520.—Yield of butter, 15 lbs. 1 oz.; test made April 9 to 15, 1882; property of Colin Cameron, Brickerville, Pa.

Forsaken 7520	Cockade 1979	Alpheus 1168	Mercury 432
			Europa 176
		Cocoanut 1694	Touchstone 315
			Zillia 2d, 1693
	Forget-Me-Not 5809	Duke P. S. 76, J. H. B.	
		Trinitaise F. S. 1343, J. H. B.	

Maid of Avranches 6959.—Yield of milk, 172 lbs.; yield of butter, 15 lbs., unsalted; test made Aug. 20 to 26, 1883; property of Thos. H. Malone, Nashville, Tenn.

Maid of Avranches 6959	Tommy on I. of J.
	Grey Queen 571, F. J. H. B.

Feed.—Cornmeal, 5 qts. daily; pasture, bluegrass, poor.

Beauty 17414.—Yield of milk, 194 lbs.; yield of butter, 15 lbs., salted; test made July 24 to July 30, 1883; age when made, 5 yrs.; property of Nathan Brownell, Hubbardsville, New York.

Beauty 17414 A. J. C. C. H. R. 371 F. S. J. H. B.	Browney 158 F. S. J. H. B. H. C.	Tom 71 H. C. F. S. J. H. B.	Welcome 172 H. C. F. S. J. H. B.
			Belle 302 F. S. J. H. B.
		Fairy 964 F. S. J. H. B.	
	Rosey 1008 F. S. J. H. B.		

Arietta 5115.—Yield of butter, 15 lbs., unsalted; age when made, 8 yrs. 8 mos.; property of James R. Crane, Washington, Ill.

Arietta 5115	Young Baron 702, imp.		
	Cowslip 1773	Earl 81	Monarch 82
			Europa 122
		Flirt 1772	John Brown 67
			Primrose 158

Mischief Le Brocq 7680.—Yield of butter, 15 lbs., unsalted; test made June 7 to 14, 1876; age when made, 5 yrs. 4 mos.; property of A. E. Kapp, Northumberland, Pa.

Mischief Le Brocq 7680	Pierrot 743, imp.
	Lady J. Gray, 592 F. S. J. H. B.

Lady Louise 4339.—Yield of butter, 15 lbs., salted; age when made, 8 yrs.; property of R. G. Skiff, Green's Farms, Conn.

- Lady Louise 4339
  - Gray Coat 1150
    - Yellow Skin 871
      - Cliff 176
      - Ariadne 608
    - St. Catherine 408, imp.
  - Gold Ear 2200
    - Jove 179
      - On I. of J.
      - St. Catherine 408, imp.
    - Hebe 2d 1178
      - John T. Norton 177, imp.
      - Hebe 1179

Oxalis 2d 15631.—Yield of milk, 197 lbs. 11 oz.; yield of butter, 15 lbs. salted; test made June 1 to 8, 1877; age when made, 5 yrs.; property of Sam'l F. Scofield, Stamford, Conn.

- Oxalis 2d 15631
  - St. Helier 45, imp.
  - Oxalis 606
    - Prince 55
      - Commodore 56, imp.
      - Duchess 82, imp.
    - Buttercup 518
      - Burgundy 201
      - Louly 373

No feed—grass alone.

Bettie Dixon 4527.—Yield of milk, 281 lbs. 8 oz.; yield of butter, 15 lbs., salted; test made June 28 to July 4, 1882; age when made, 6 yrs. 11 mos.; property of W. B. Montgomery, Starkville, Miss.

- Bettie Dixon 4527
  - Aldine 1136
    - Nelusko 479
      - Rajah 340
      - Nellie 55
    - Gazelle of Mobile 1735, imp.
  - Cenie Wallace 2663
    - Jove Jr. 870
      - Jove 179, imp.
      - Hebe 4th
    - St. Mary 409, imp.

Verbena of Fernwood 9088.—Yield of milk, 196 lbs. 13 oz.; yield of butter, 15 lbs., salted; test made Jan. 6 to 13, 1883; age when made, 4 yrs. 5 mos.; property of Harrison Leib, Cincinnati, Ohio.

- Verbena of Fernwood 9088
  - Balboa 1244
    - Duke of Greyholdt 1035, imp.
    - Ibex 2724, imp.
  - Vanilla 3834
    - Duke of Greyholdt 1035, imp.
    - Vexation 2760
      - Brutus Woodford 703, imp.
      - Vesper Lass 1784, imp.

Arthur's Frolic 4438.—Yield of milk, 241 lbs.; yield of butter, 15 lbs., salted; test made June 5 to 12, 1882; age when made, 13 yrs.; property of A. H. Cooley, Little Britain, N. Y.

Arthur's Frolic 4438, imp.

Grace Felch 8291.—Yield of milk, 192 lbs. 5 oz.; yield of butter, 15 lbs.; test made Aug. 21 to 27, 1882.

- Grace Felch 8291
  - Ike Felch 1291
    - Imp. Critic 540
      - Orange Peel 502, imp.
      - Imp. Cannie 1359
    - Imp. Maid of Inda 2429
  - Grace Darling 2d 304
    - Excelsior 949, imp.
    - Grace Darling 299, imp.

Trudie 2d 4084.—Yield of butter, 15 lbs.; test made May 10 to 17, 1882; age when made, 4 yrs. 11 mos.; property of Thos. H. Faile, New York, N. Y.

- Trudie 2d 4084
  - Bismarck 1423, imp.
  - Trudie 277
    - Glengary 316
      - Jupiter 93
      - Edna 807
    - Edith 2d 805
      - Saturn 94
      - Edith 167

Sister Dorothy 2607.—Yield of butter, 15 lbs.; test made Sept. 19 to 25, 1881; age when made, 10 yrs. 9 mos.; property of G. Dawson Coleman, Brickerville, Pa.

- Sister Dorothy 2607
  - On Island
  - Sister 1427, imp. in 1870

Rene Ogden 1568.—Yield of butter, 15 lbs.; property of W. S. Taylor, Burlington, N. J.

- René Ogden 1568
  - Don 611
    - Duke 610
      - Garibaldi 609
      - Alice 474
    - Fawn 476
      - Bill 50
      - Fancy 9
  - René 2d 56
    - Nimrod 28
      - Beckwith's Bull 29
      - Young Duchess 41
    - René 39
      - Splendid 2
      - Lily 2d 40

Archie 1112, imp.—Yield of butter, 15 lbs.; test made June 17 to 23, 1878; age when made, 10 yrs.; property of Jas. A. Hayt, Patterson, N. Y.

Archie 1112, imported.

Daisy Grant 1445.—Yield of butter, 15 lbs.; test made June 3 to 9, 1878; age when made, 9 yrs.; property of Jas. A. Hayt, Paterson, N. J.

Daisy Grant, imp. 1445

Mary Clover 9998.—Yield of milk, 212 lbs. 8 oz.; yield of butter, 14 lbs. 15 oz., salted; test made May 21 to 28, 1883; age when made, 6 yrs. 4½ mos.; property of C. J. Wemple, New Rochelle, N. Y.

- Mary Clover 9998
  - Beeswax 1931
    - Wethersfield 966
      - Albert 44
      - Grinnella, imp. 1302
    - Lilly 2578
      - Romeo 98
      - Pansy 1019
  - Betty Clover 3784
    - Narragansett 375
      - Challenger 376
      - Flora 2d 979
    - Leah 2968
      - Livingstorm 173
      - Clover 2d 2902

Sweet Sixteen 10682.—Yield of milk, 127 lbs.; yield of butter, 14 lbs. 15 oz., salted; test made July 4 to 10, 1883; age when made, 3 yrs.; property of H. M. Howe, Bristol, R. I.

- Sweet Sixteen 10682
  - Gilderoy 2107
    - Magnetic 1428
      - Islander 561
      - Azalea 1443
    - Jeanne Le Bas 2476, imp.
      - John Le Bas 398
      - Dairy Pride 348, J. H. B.
  - Lillie Lenape 2d 8760, imp.
    - Jimmy 150, J. H. B.
      - Duke 76, J. H. B.
      - Flora 813, J. H. B.
    - Lillie Lenape 7347, imp.

Miss Baden Baden 14760.—Yield of butter, 14 lbs. 14½ oz., salted; test made May 22 to 29, 1883; age when made, 3 yrs. 1 mo.; property of R. S. Strader, Lexington, Ky.

- Miss Baden Baden 14760
  - Baden Baden 3973
    - Duke of Grayholdt 1035, imp.
      - Crown Prince of Woodburn 1211
      - Imp. Mouse 2552
    - Moose 4126
      - Governor 890
      - Eve 5th, 312
  - Little Gentle 4640
    - Essex of Staatsburg 892
      - Imp. Deacon 293
      - Imp. Gipsey 2d, 737
    - Gentle Gipsey 2250

Feed.—Grass alone.

Faustine 10354.—Yield of milk, 225 lbs. 9 oz.; yield of butter, 14 lbs. 14½ oz., salted; test made Aug. 6 to 12, 1883; age when made, 5 yrs. 5 mos.; property of Wm. Simpson, New York.

- Faustine 10354
  - Mopsus 1165
    - Dolphin 2d 468
    - Julia Richards 1674
      - Bashan 2d 363
      - Lady Richards 1017
  - Antianira 2457
    - Mercury 432
      - Jupiter 93
      - Alphea 171
    - Proserpine 1184, imp.

Jenny Le Brocq 9757.—Yield of butter, 14 lbs. 14 oz., salted; test made Jan., 1881; age when made, 4 yrs.; property of S. W. Robbins, Wethersfield, Conn.

- Jenny Le Brocq 9757
  - Hero 90, P. S. H. C. J. H. B.
    - Welcome 172, J. H. B. H. C.
    - Musique 1096, J. H. B. H. C.
  - Jeune Jenny 706, J. H. B. F. S. H. C.

Gold Mark 10727.—Yield of milk, 197 lbs.; yield of butter, 14 lbs. 14 oz., salted; test made June 15 to 22, 1882; age when made, 2 yrs. 11 mos.; property of Spencer Borden, Fall River.

- Gold Mark 10727
  - Gilderoy 2107
    - Magnetic 1428
      - Islander 561
      - Azalea 1443
    - Jeanne Le Bas 2476
      - Noble 71
      - Dairy Pride 348
  - Goldlace 10726
    - Roanoke 1448
      - Beech Nut 109
      - Princess 336, imp.
    - Delpha 2d 10713
      - Excelsior 647
      - Delpha 1532

Florry Keep 6556.—Yield of milk, 231 lbs. 8 oz.; yield of butter, 14 lbs. 14 oz., unsalted; test made May 2 to 8, 1883; property of W. B. Montgomery, Starkville, Miss.

- Florry Keep 6556
  - Ralph 957
    - St. Helier 45
    - Ibi 671
      - Bertie 267
      - Claude 669
  - Orange Flower 2d 3884
    - Nelusko 479
      - Rajah 340
      - Nellie 55
    - Orange Flower 2202
      - Meteor 453
      - Hebe 4th 1180

Honeysuckle of St. Lamberts 18674.—Yield of milk, 285 lbs.; yield of butter, 14 lbs. 14 oz., salted; test made Dec. 3 to 9, 1883; age when made, 3 yrs. 9 mos.; property of Wm. Rolph, Markham, Ont.

- Honeysuckle of St. Lamberts 18674
  - Jack Frost of St. L. 2419
    - Buffer 2055
      - Lord Monck 304
      - Amelia 484
  - Clematis of St. L. 5478
    - Lord Lisgar 1066
      - Victor Hugo 197
      - Pauline 494
    - Snowdrop of St. L. 5119
      - Defiance 196
      - Lydie 495

Velveteen 7703.—Yield of milk, 212 lbs.; yield of butter, 14 lbs. 13½ oz., unsalted; test made May 1 to 7, 1882; age when made, about 4 yrs.; property of Thos. H. Malone, Nashville, Tenn.

Velveteen 7703, imp.

This cow aborted Nov. 12, 1882. She was not fed. Pasture, bluegrass, very fine.

Alice of the Meadows 20748.—Yield of milk, 243 lbs. 13 oz.; yield of butter, 14 lbs. 12 oz., salted; test made May 23 to 29, 1883; age when made, 3 yrs. 9½ mos.; property of Richard Rowett, Quincy, Ill.

- Alice of the Meadows 20748
  - Duke of Daffodil 1662
    - Mack 722
      - Clement 115, imp.
      - Sunflower 351
    - Daffodil 307, imp.
  - Alice 540
    - Don 218
      - Earl 219
      - Doll 542
    - Jessie 541
      - Comet 223
      - Tulip 543

Queen of De Soto 12318.—Yield of butter, 14 lbs. 13 oz., unsalted; test made Aug. 9 to 15, 1882; age when made, 2 yrs. 5 mos.; property of Edward Mayes, Oxford, Miss.

- Queen of De Soto 12318
  - Dode 3057
    - Emiline 2039
      - Jachin 1220
      - Emma 2d 2256
    - Lizzie Ringling 5813
      - Stansberry 367
      - Daisy 5712, imp.
  - Emiline 5185
    - Jachin 1220
      - Yankee 1003, imp.
      - Jennie 3d 2244
    - Emma 2d 2256
      - Hector of Plymouth Rock 886
      - Emma 1551

Duchess of Argyle 3758.—Yield of milk, 198 lbs. 12 oz.; yield of butter, 14 lbs. 13 oz., salted; test made Jan. 11 to 18, 1883; age when made, 10 yrs. 3 mos.; property of E. S. Henry, Rockville, Conn.

- Duchess of Argyle 3758
  - Jack Dasher 6327
    - Tom Dasher 420
      - Albert 44
      - Flora 420
    - Judy 691
      - Comet 223
      - Daisy 692, imp.
  - Berlin Daisey 3759
    - Com. Nutt 36
      - Emperor 2d 37
      - Mignonette 6, imp.
    - Snowflake 1044
      - Dan Buck Jr. 382
      - Rose 394

Louvie 3d 6159.—Yield of butter, 14 lbs. 13 oz., salted; test made Feb. 1 to 8, 1883; age when made, 5 yrs. 6 mos.; property of W. S. & H. E. Savage, East Berlin, Conn.

- Louvie 3d 6159
  - Rex 1330
    - Colt Jr. 825
      - Rob Roy 17
      - Maggie 2054
    - Couch's Lily 6237
      - Albert 44
      - Lily Dale 3236
  - Louvie 3899
    - Nestor 773
      - Albert 44
      - Lady Mel 427
    - Dahlia 401
      - Raghorn 175
      - Mignonette 6

Gold Lace 10726.—Yield of butter, 14 lbs. 13 oz., salted; test made June 11 to 18, 1880; age when made, 4 yrs.; property of R. H. Perry, Bristol, R. I.

- Gold Lace 10726
  - Roanoke 1448
    - Beech Nut 109
      - Blucher 2d 102
      - Fanny 72
    - Princess 336, imp.
  - Delpha 2d 10713
    - Excelsior 647
      - Ned 523, imp.
      - Cushing's No. 3, 1638, imp.
    - Delpha 1532
      - Santa Anna 221, imp.
      - Dolly 545, imp.

Lady Bloomfield 4704.—Yield of butter, 14 lbs. 12½ oz.; property of Jno. B. Mills, Griffin, Ga.

- Lady Bloomfield 4704
  - Rioter 670
  - Bloomfield Fairy 2d 3210
    - Rioter 670, imp.
    - Bloomfield Fairy 1681 imp.

Ideal 11842.—Yield of milk, 204 lbs.; yield of butter, 14 lbs. 12½ oz., salted; test made Feb. 15 to 21, 1883; age when made, 3 yrs. 6 mos.; property of Wm. Simpson, New York.

- Ideal 11842
  - Cecco 1673
    - Mercury 432
      - Jupiter 93
      - Alphea 171
    - Ceres 427, imp.
  - Lerna 3634
    - Mercury 432
      - Jupiter 93
      - Alphea 171
    - Gussie Richards 1673
      - Admiral 372
      - Lady Richards 1017

Pet Lee 7993.—Yield of butter, 14 lbs. 12 oz.

- Pet Lee 7993
  - Padisha 1623
    - Rajah 340, imp.
    - Grisette 596, imp.
  - Julia Parks 3778
    - Duke of Framingham 1521
      - On Island
      - White Rose 3771
    - Kitty Parks 3765

Katy Didn't 2734.—Yield of butter, 14 lbs. 12 oz.; test made June 19 to 25, 1878; age when made, 7 yrs.; property of Jas. A. Hayt, Patterson, N. Y.

Katy Didn't 2734, imp.

Estrella 2831.—Yield of butter, 14 lbs. 12 oz.; test made May 20 to 27, 1877; age when made, 5 yrs. 8 mos.; property of Rev. J. L. Wells, Southport, Conn.

- Estrella 2831
  - Meteor 453
    - Cliff 176
      - Dick Swiveler 159
      - Fanny 365
    - Gilt 1176
      - Saratoga 135
      - Hebe 2d 1178
  - Ariadne 2d 1135
    - Cliff 176
      - Dick Swiveler 159
      - Fanny 365
    - Ariadne 608
      - Jupiter 93
      - Alphea 171

Lady Brown 4th 6911.—Yield of butter, 14 lbs. 12 oz.; test made May 16 to 23, 1878; age when made, 5 yrs.; property of Jas. Woodruff, Terryville, Conn.

- Lady Brown 4th 6911
  - Albert 44
    - Jerry 15
    - Frankie 17
  - Lady Brown 433
    - McClellan 4th 85
      - McClellan 25
      - Lily 1
    - Pansy 7th 130
      - Jno. Brown 67
      - Pansy 8

Maple Leaf 4768.—Yield of butter, 14 lbs. 12 oz.; property of Jno. D. Wing, Millbrook, N. Y.

- Maple Leaf 4768
  - Ontario 865
    - Black Imperial 255
      - Derby 253
      - Bronx 306
    - Helen 2180
      - Derby 253
      - Buttercup 2179
  - Echo 2223
    - Lord Nelson 860
      - Derby 253
      - Knapp Cow 2172
    - Edith 2d 805
      - Saturn 94
      - Edith 167

Cowles' Nonesuch 6199.—Yield of milk, 255 lbs. 4 oz.; yield of butter, 14 lbs. 12 oz., salted; test made Oct. 5 to 11, 1883; age when made, 7 yrs.; property of L. M. Fair, Wallingford, Conn.

- Cowles' Nonesuch 6199
  - Pulaski 1932
    - John Allen 1494
      - Tom Dasher 420
      - Allen's Fawnette 3722
    - Lady Orton 2667
      - Box 1011
      - Butter Cup 1100
  - Clinton Cowles 6198
    - Ishmael Hurd 1548
      - Major Tunxes 1547
      - Buck's Kate 3463
    - Kitty of Farmington 6197
      - Grey Wethersfield 1250
      - Dickinson's Belle 4395

Lady Gray of Hilltop 2d 14641.—Yield of milk, 243 lbs. 15 oz.; yield of butter, 14 lbs. 12 oz., salted; test made Jan. 20 to 26, 1883; age when made, 4 yrs. 6 mos.; property of L. M. Fair, Wallingford, Conn.

- Lady Gray of Hilltop 2d 14641
  - Champion of Hilltop 1839
    - Champion of A. 1567
      - May Boy 705
      - Pansy 1019
    - Kate Nickleby 3100
      - Tom Dasher 420
      - Bessie Hurd 3099
  - Lady Gray of Hilltop 6850
    - Wethersfield 966
      - Albert 44
      - Grinnella 2d 1304
    - Bess Lena 3349
      - Sam 980
      - Lena 3347

Imp. Content of Linwood 6950.—Yield of milk, 158 lbs.; yield of butter, 14 lbs. 12 oz., unsalted; test made March 5 to 12, 1883; age when made, 7 yrs.; property of M. M. Gardner, Nashville, Tenn.

- Imp. Content of Linwood 6950
  - Loyal on I. of J.
  - Mignonne on I. of J.

Princess Bowen 9699.—Yield of milk, 202 lbs. 14 oz.: yield of butter, 14 lbs. 12 oz., salted; test made April 20 to 28, 1883; age when made, 6 yrs.; property of Jas. Cloud & Son, Kennett Square, Pa.

- Princess Bowen 9699
  - Duke of Bloomfield 1544
    - Rioter 670, imp.
    - Alice Bloomfield 1680, imp.
  - Lady Bowen 354

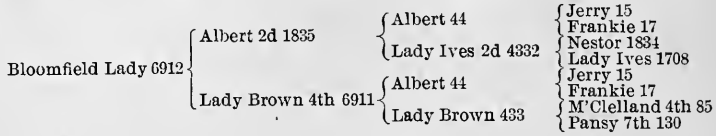
Magnibel 7976.—Yield of butter, 4 lbs. 12 oz., salted; test made June 24 to July 1, 1883; age when made, 4 yrs. 6 mos.; property of Robert S. Taylor, Fort Wayne, Ind.

- Magnibel 7976
  - Magnetic 1428
    - Islander 561
      - Noble 71 F. J. H. B.
      - Ida 1441
    - Azalea 1443
      - Noble 71 F. J. H. B.
      - Nellie 289
  - Hinnibel 4040
    - Belisario 640
      - Pilot Boy 488
      - Flora 1422
    - Flora Hinman 1272
      - Hinman 78
      - Florette 124

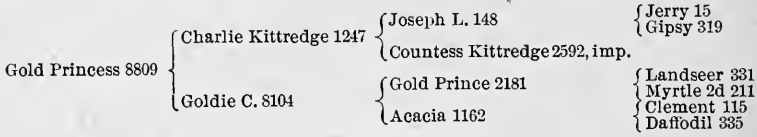
Princess 836.—Yield of butter, 14 lbs. 12 oz., unsalted.

Princess 836 imp.

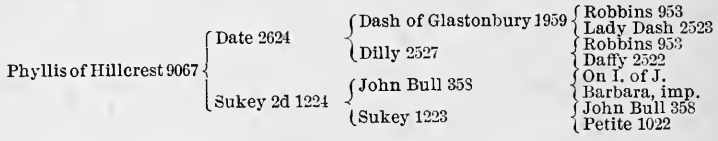
Bloomfield Lady 6912.—Yield of butter, 14 lbs. 12 oz., unsalted; test made May 2 to 9, 1882; age when made, 6 yrs. 6 mos.; property of J. H. Walker, Worcester, Mass.



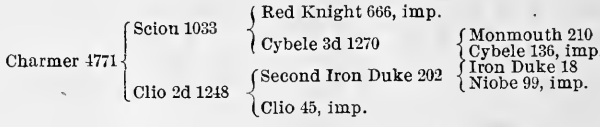
Gold Princess 8809.—Yield of butter, 14 lbs. 12 oz., salted; test made March 22 to 28, 1882; age when made, 3 yrs. 18 days; property of R. McMichael, Lexington, Ky.



Phyllis of Hillcrest 9067.—Yield of butter, 14 lbs. 12 oz., salted; test made May 28 to June 3, 1883; age when made, 3 yrs. 10 mos.; property of W. A. Mullen, Mt. Holly Springs, Pa.



Charmer 4771.—Yield of milk, 257 lbs. 11 oz.; yield of butter, 14 lbs. 12 oz., salted; test made Aug. 1 to 7, 1883; age when made, 7 yrs. 5 mos.; property of Henry C. Kelsey, Trenton, N. J.



Feed.—Seven lbs., in equal parts, of cornmeal, cottonseed meal and wheat bran; pasture, in day clover, at night orchard grass.

Roll of Honor 13610.—Yield of butter, 14 lbs. 12 oz., salted; test made Jan. 2 to 8, 1883; age when made, 4 yrs. 4 mos.; property of Jas. B. Wilder, Louisville, Ky.

- Roll of Honor 13610
  - Much Ado 2405
    - Dash of Glastonbury 1959
      - Robbins 953
      - Lady Dash 2523
    - Dandelion 2521, imp.
  - Phryne 4289
    - Second Duke of Hillcrest 1086
      - Standard 553
      - Picture 1533
    - Sukey 2d 1224
      - John Bull 358
      - Sukey 1223

Jersey Cream 2d 8519.—Yield of butter, 14 lbs. 12 oz., salted; test made June 2 to 7, 1882; age when made, 5 yrs. 1½ mos.; property of H. G. Westlake, Hillsdale, Miss.

- Jersey Cream 2d 8519
  - King of Fairview 778
    - Rob Roy 17, imp.
    - Eugenie 792, imp.
  - Jersey Cream 3151
    - Tom Dasher 420
      - Albert 44
      - Flora 420
    - Creampot 460, imp.

Sweetrock 18256.—Yield of butter, 14 lbs. 11½ oz., unsalted; test made May 1 to 8, 1883; age when made, 4 yrs.; property of W. B. Dinsmore, Staatsburg, N. Y.

- Sweetrock 18256, imp. Aug. 1881
  - Jazell P. S. 159 J. H. B.
  - Sweetrock P. S. 258 J. H. B.

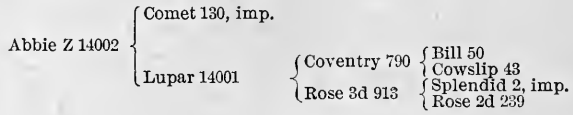
Bonnie 2d 5742.—Yield of milk, 200 lbs. 2 oz.; yield of butter, 14 lbs. 11½ oz., unsalted; test made Dec. 11 to 17, 1883; age when made, 6 yrs. 7 mos.; property of S. E. Gillett, Ravenna, Ohio.

- Bonnie 2d 5742
  - Baronet 2240
    - Lord Lisgar 1066
      - Victor Hugo 197
      - Pauline 494
    - Amelia 484, imp.
  - Bonnie 491, imp.

Bessie Ridgely 8293.—Yield of butter, 14 lbs. 11½ oz., salted; property of C. S. S. Baron, Bellaire, Ohio.

- Bessie Ridgely 8293
  - John Ridgely 3045
    - Young Sir Davy 3034
      - Young Davy 661
      - Susan 1658
    - Button 2d 3160
      - Sam 432
      - Button 954
  - Grace Davy 8292
    - Sir Davy 84
    - Grace Darling 2d 304
      - Grace Darling 299

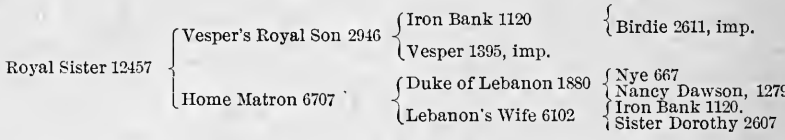
Abbie Z 14002.—Yield of milk, 329 lbs.; yield of butter, 14 lbs. 11 oz., salted; test made June 6 to 12, 1876; age when made, 6 yrs. 1 mo.; property of Harvey Newton, Southville, Mass.



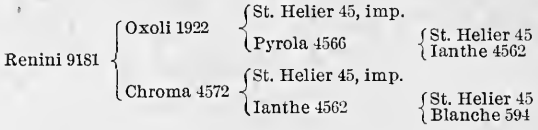
Maiden of Jersey.—Yield of butter, 14 lbs. 11 oz.; test made June 1 to 7, 1878; age when made, 8 yrs.; property of James A. Hayt, Patterson, N. Y.

Maiden of Jersey 2736, imp.

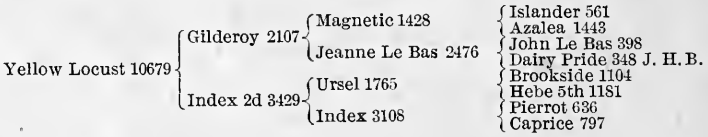
Royal Sister 12457.—Yield of milk, 212 lbs. 8 oz.; yield of butter, 14 lbs. 11 oz., salted; test made Sept. 1 to 7, 1883; age when made, 3 yrs. 5 mos.; property of S. L. Hoover, Columbus, O.



Renini 9181.—Yield of milk, 206¾ lbs.; yield of butter, 14 lbs. 10½ oz.; test made Oct. 17 to 23, 1881; age when made, 4 yrs.; property of Chas. Keep, Lockport, N. Y.



Yellow Locust 10679.—Yield of milk, 163 lbs.; Yield of butter, 14 lbs. 10½ oz., salted; test made July 6 to 12, 1883; age when made, 3 yrs. 3 mos.; property of H. M. Howe, Bristol, R. I.



Opaline 7590.—Yield of milk, 223 lbs. 7 oz.; yield of butter, 14 lbs. 10 oz.; test made Aug. 15 to 22, 1883; age when made, 5 yrs. 4 mos.; property of M. M. Gardner, Nashville, Tenn.

- Opaline 7590
  - Top Sawyer 1404
    - Marius 760
      - Willie Boy 434
      - Imp. Lady Mary 1148
    - Imp. Emblem 90
      - Imp. Clement 115 F. S. 61 J. H. B.
      - On I. of J.
  - Silver Rose 4753
    - Pilot Jr. 141
      - Pilot 3
      - Imp. Jennie 287
    - Rosa 122
      - Cheltenham 80
      - Brunette 102

Jennie 766.—Yield of milk, 105 qts.; yield of butter, 14 lbs. 9 oz.; test made Sept. 10 to 16, 1872; age when made, 6 yrs.; property of W. B. Dinsmore, Staatsburg, N. Y.

Jennie 766, imp.

Mink 3d 4868.—Yield of milk, 253 lbs. 8 oz.; yield of butter, 14 lbs. 9 oz., salted; test made Aug. 12 to 18, 1883; age when made, 7 yrs. 3 mos.; property of W. B. Montgomery, Starkville, Miss.

- Mink 3d 4868
  - Hub 1009
    - Motley 515
      - Jack Horner 2517
      - Meg Merrilies 1372
    - Bessie 139, imp.
  - Mink 2548
    - Magnet 968
      - Mr. Micawber 556
      - Mabel 2544
    - Mattie Micawber 2547
      - Mr. Micawber 556
      - Mischief of Roxbury 2538

Island Dots 17003.—Yield of milk, 202 lbs. 8½ oz.; yield of butter, 14 lbs. 9 oz., salted; test made July 21 to 27, 1883; age when made, 1 yr. 9 mos.; property of Fred B. Simpson, New York.

- Island Dots 17003
  - Pride of the Island 5416, imp.
  - Lady Lillie 11813, imp.

Regina 2d 2475.—Yield of butter, 14 lbs. 8 oz. in 7 days; property of Mr. H. Borden Bowen, Bristol, R. I.

- Regina 2d 2475, imp.
  - Noble 104 Island H. B.
    - Sultan 58 J. H. B.
      - Prince of Wales
      - Flower 53 F. J. H. B.
    - Handsome 265 F. J. H. B.
  - Regina 32 J. H. B.
    - Old Noble
    - Mignonne

Alice of Salem 5053.—Yield of butter, 14 lbs. 8 oz.; test made summer 1874; age when made, 4 yrs.; property of William Cooper, Easton, Maryland.

- Alice of Salem 5053
  - Clement 115 No. 61 F. S. imp.
  - Gunilda 662
    - Earl 81
      - Monach 82
      - Europa 121
    - Candour 325
      - Figaro 154
      - Constance 322

Goddess of Staatsburg 5252.—Yield of butter, 14 lbs. 8 oz., unsalted; test made June 30 to July 6, 1883; age when made, 7 yrs. 6 mos.; property of W. B. Dinsmore, Staatsburg, N. Y.

- Goddess of Staatsburg 5252
  - Vermont 893
    - Governor 890
      - Napoleon 291, imp.
      - Victorine 2233, imp.
  - Gipsey 4th 782
    - Jerry 15, imp.
    - Gipsey 319, imp.

Pavon 12485.—Yield of milk, 134 lbs. 8 oz.; yield of butter, 14 lbs. 8 oz., unsalted; test made Feb. 6 to 13, 1882; age when made, 2 yrs. 1 mo.; property of J. H. Walker, Worcester, Mass.

- Pavon 12485
  - St. Helier 45
  - Moss Rose of Willow Farm 5194
    - Young Concord 1406
      - Concord 1405
      - Molly 3554
    - Molly 3554
      - Dick 1410
      - Venus 112

Dolly of Lakeside 10824.—Yield of milk, 204 lbs. 8 oz.; yield of butter, 14 lbs. 8 oz., unsalted; test made Feb. 15 to 22, 1883; age when made, 6 yrs. 10 mos.; property of J. H. Walker, Worcester, Mass.

- Dolly of Lakeside 10824
  - Micawber 4796
    - Mr. Micawber 556, imp.
    - Rosa of Lakeside 2d 10241
      - Pilot 3549
      - Rosa of Lakeside 10238
  - Dove 2d 8742
    - Pilot 3549
      - Dick Swiveller Jr. 296
      - Nellie 7825
    - Dove 7824
      - Czar 273
      - Duchess 548

Lady Ives 3d 6740.—Yield of butter, 14 lbs. 8 oz., unsalted; test made April 8 to 15, 1883; age when made, 9 yrs.; property of J. H. Walker, Worcester, Mass.

- Lady Ives 3d 6740
  - Success 2097
    - Lord Ogden 69
      - Adonis 39
      - Big Duchess 58
    - Belinda 1128
      - Blucher 2d 102
      - Belle Hudson 1127
  - Lady Ives 1708
    - Raghorn 175
      - Splendid 2
      - Rose 394
    - Gridley's Clover 5, imp.

Snowdrop F. W. 16948.—Yield of milk, 168 lbs.; yield of butter, 14 lbs. 8 oz., unsalted; test made June 10 to 17, 1883; age when made, 8 yrs. 11 mos.; property of J. H. Walker, Worcester, Mass.

- Snowdrop F. W. 16948
  - Duke F. 6134
    - Byron 279
      - Mark Tapley 270
      - Bettie 683
    - Dazzle 379
  - Chloe of Millwood 14083
    - Diogenes 277
      - M'Clelland 323
      - Diana 672
    - Countess of Millwood 14081
      - Tom Tittler 87
      - Countess 2d 991

Bryant 4193.—Yield of milk, 235 lbs.; yield of butter, 14 lbs. 8 oz., unsalted; test made July 10 to 16, 1881; age when made, 6 yrs. 4 mos.; property of Geo. E. Bryant, Madison, Wis.

- Bryant 4193
  - Omaha 482
    - Omoo 1247
  - Metah 1295
    - St. Malo 486, imp.
    - Myrtle 1294, imp.

Cottage Lass 5332.—Yield of milk, 217 lbs. 12 oz.; yield of butter, 14 lbs. 8 oz.; test made May 16 to 23, 1883; property of Columbia Jersey Cattle Company, Columbia, Tenn.

- Cottage Lass 5332
  - Guy Mannering 698
    - On I. of J.
    - Brunette Lass 1780, imp.
  - Clyte Lass 3395
    - Vespucius 758
      - On I. of J.
      - Vesper Lass 1784
    - Daisy Lass 2010, imp.

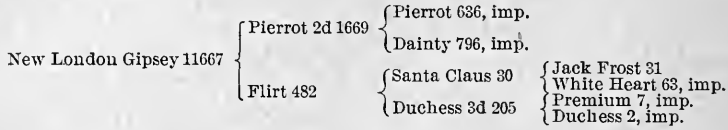
Hartwick Belle 7722.—Yield of milk, 189 lbs. 13 oz.; yield of butter, 14 lbs. 8 oz., salted; test made May 3 to 9, 1883; age when made, 4 yrs. 6 mos.; property of Wm. Simpson, New York.

- Hartwick Belle 7722
  - Grand Duke Alexis 1040, imp. in dam Victorine Lachaise 2740
  - Clytemnestra 2455
    - Mercury 432
      - Jupiter 93
      - Alphea 177
    - Leda 799
      - Jupiter 93
      - Europa 176

Plenty 950.—Yield of butter, 14 lb. 8 oz.; test made June, 1873; age when made, 10 yrs.; property of Thomas T. Turner, St. Louis, Mo.

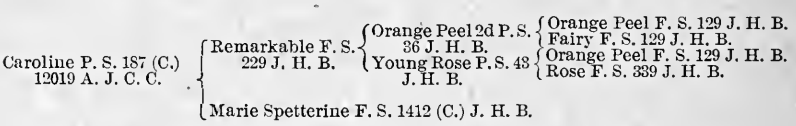
- Plenty 950
  - Comus 54, imp. in dam Dianna 77
  - Beck 463, imp.

New London Gipsey 11667.—Yield of milk, 241 lbs.; yield of butter, 14 lbs. 8 oz., salted; test made April 27 to May 3, 1882; age when made, 6 yrs. 2 mos.; property of Garrettson Bros., Pendleton, Ind.

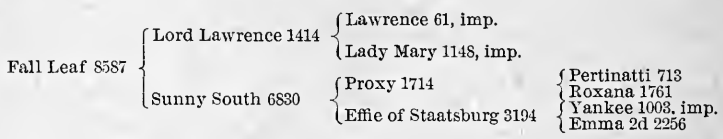


Feed—One-half bushel of corn boiled on the cob; pasture, young bluegrass.

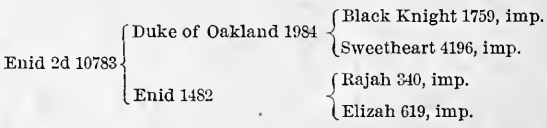
Imp. Caroline 12019.—Yield of milk, 218 lbs. 12 oz.; yield of butter, 14 lbs. 8 oz.; test made Feb. 12 to 21, 1882; age when made, 6 yrs. 11 mos.; property of J. M. Richmond, Buffalo, N. Y.


Caroline P. S. 187 (C.) 12019 A. J. C. C.
Remarkable F. S. 229 J. H. B.
Orange Peel 2d P. S. 36 J. H. B.
Orange Peel F. S. 129 J. H. B.
Fairy F. S. 129 J. H. B.
Young Rose P. S. 43 J. H. B.
Orange Peel F. S. 129 J. H. B.
Rose F. S. 339 J. H. B.
Marie Spetterine F. S. 1412 (C.) J. H. B.

Fall Leaf 8587.—Yield of milk, 256 lbs.; yield of butter, 14 lbs. 8 oz., salted $\frac{3}{4}$ oz. to lb.; test made Sept. 15 to 21, 1882; age when made, 3 yrs. 10 mos.; property of W. E. Oates, Vicksburg, Miss.



Enid 2d 10783.—Yield of milk, 187 lbs. 8 oz.; yield of butter, 14 lbs. $7\frac{1}{2}$ oz., salted; test made March 31 to April 6, 1882; age when made, 2 yrs. 3 mos. property of H. M. Howe, Bristol, R. I.



Feed—Cornmeal, ground oats and bran; 1 peck sugar beets daily; no pasture.

Lorraine 1435.—Yield of butter, 14 lbs. 8 oz., salted; test made May 7 to 13, 1874; age when made, 3 yrs. 9 mos.; property of Amanda Estes, Rogers Park, Ill.

Lorraine 1435, imp. in dam Lady Rhine.

Thorndale Belle 5265.—Yield of milk, 172 lbs.; yield of butter, 14 lbs. 8 oz., unsalted; test made May 4 to 10, 1880; age when made, 6 yrs.; property of Edwin Thorne, Millbrook, N. Y.

- Thorndale Belle 5265
  - Barney 1491, imp.
  - Lena Lewis 3735
    - Frank Warren 1490
      - Gen. Warren 1489
      - Cowslip 3706
    - Fawn 3d 3707
      - Jersey Hero 1488
      - Fawn 3704

Pride of the Hill 4877.—Yield of butter, 14 lbs. 8 oz., salted; test made July 20 to 27, 1882; age when made, 7 yrs. 2 mos.; property of G. J. Shaw, Hartland, Me.

- Pride of the Hill 4877
  - Nutshell 729
    - Nelusko 479
      - Rajah 340
      - Nelly 55
    - Fanny Ogden 1564
      - Don 611
      - Fanny 2d 371
  - Guinivere 1484
    - Rajah 340, imp.
    - Grisette 596, imp.

Chloe Beach 3931.—Yield of butter, 14 lbs. 8 oz.; property of Lyman A. Mills, Middlefield, Conn.

- Chloe Beach 3931
  - Colt Jr. 825
    - Rob Roy 17, imp.
    - Maggie 2054
      - Rhodes Bull 824
      - Bradley Cow 2054
  - Bright Eyes 1517
    - King Harold 344
      - On I.
      - Mabille 907
    - Snowflakes 1004
      - Dan Buck Jr. 382
      - Rose 394

La Pera 2d 13404.—Yield of milk, 210 lbs. 8 oz.; yield of butter, 14 lbs. 8 oz., unsalted; test made July 14 to 20, 1883; age when made, 3 yrs. 11 mos.; property of W. L. and W. Rutherford, Waddington, N. Y.

- La Pera 2d 13404
  - Kahela 2859
    - Lord Byron 707
      - On I. of J.
      - Black Bess 1788
    - Lady Gwendoline 2873
      - St. Malo 486
      - Black Bess 1788
  - La Pera 7091
    - Earl of Brookside 1677
      - Kago 1353
      - Kosi 3431
    - Webster Pet 4103
      - Ch. of America 1567
      - Churchill Betsy 4105

Kosi 3431.—Yield of milk, 198 lbs. 3 oz.; yield of butter, 14 lbs. 7 oz., salted; test made June 10 to 17, 1882; age when made, 12 yrs.; property of W. B. Walrath, Clayton, N. Y.

Kosi 3431, imp.

Feed—None; pasture, short mixed grasses.

Flory of the Oaks 8141.—Yield of butter, 14 lbs. 7 oz., unsalted; test made June 8 to 15, 1883; age when made, 6 yrs.; property of W. B. Dinsmore, Staatsburg, N. Y.

Flory of the Oaks 8141, imp. Feb. 1879.

Milkweed 16402.—Yield of milk, 189 lbs. 8 oz.; yield of butter, 14 lbs. 7 oz., unsalted; test made Jan. 28 to Feb. 3, 1883; age when made, 8 yrs. 7 mos.; property of Edw. Worth, Wawa, Pa.

Milkweed 16402, F. S. 1673 J. H. B.

Feed—1 qt. ground corn, 2 qts. wheat bran, night and morning, with cut hay; no pasture.

Aspirant 9272.—Yield of milk, 238 lbs.; yield of butter, 14 lbs. 7 oz., salted 1 oz. to lb.; test made June 20 to 26, 1881; age when made, 4 yrs. 15 days; property of Seth L. Hoover, Columbus, O.

Aspirant 9272
- Columbiad 2d 1515
  - Columbiad 534, imp.
  - Celestia 1898, imp. in dam
    - Pearl Drop 1409
- Perfection 1897
  - Columbiad 534, imp.
  - Purity 1402, imp.

Nora of St. Lambert 12962.—Yield of milk, 243 lbs.; yield of butter, 14 lbs. 7 oz., salted 1 oz. to lb.; test made Dec. 6 to 12, 1882; age when made, 2 yrs. 11 mos.; property of W. D. Reesor, Yorkville, Ont.

Nora of St. Lambert 12962
- Stoke Pogis 3d 2238
  - Stoke Pogis 1259, imp.
  - Marjoram 3239, imp.
- Duchess 5111
  - Lord Lisgar 1066
    - Victor Hugo 197, imp.
    - Pauline 494, imp.
  - Pride of Windsor 483

Sunny Lass 6033.—Yield of milk, 192 lbs. 12½ oz.; yield of butter, 14 lbs. 7 oz., unsalted; test made Jan. 13 to 19, 1882; age when made, 4 yrs. 9 mos.; property of D. A. Givens, Cynthiana, Ky.

- Sunny Lass 6033
  - Balboa 1244
    - Duke of Greyholdt 1035
    - Ibex 2724
  - Twilight Lass 2698
    - Young Baron 702
    - Vesper Lass 1784

Daisy of Chenango 18582.—Yield of milk, 252 lbs. 12 oz.; yield of butter, 14 lbs. 7 oz., salted; test made June 15 to 21, 1883; age when made, 5 yrs. 5 mos.; property of Hiram A. Jewell, Mt. Upton.

- Daisy of Chenango 18582
  - Prince of Sidney 2665
    - Noble 901, imp.
      - Noble 104 F. H. C.
      - Fanny of Babylon 2345
    - Dahlia of Babylon 2396, imp.
  - Daisy 684
    - Jersey Boy 272
      - Czar 273, imp.
      - Fanny 675
    - Diana 672
      - Diamond 155
      - Flora 113, imp.

Nibbette 11625.—Yield of milk, 232 lbs. 12 oz.; yield of butter, 14 lbs. 7 oz., salted; test made Oct. 17, 1883; age when made, 4 yrs. 4 mos.; property of T. L. Hacker, Madison, Wis.

- Nibbette 11625
  - Fast Boy 2606
    - Bon Ton 1656
      - Antocrat 1065, imp.
      - Bonfanti 388
    - Artless 3992
      - Autocrat 1065
      - Atlanta 402
  - Nibbette 6796
    - The Squire 1298
      - Mr. Toodles 377
      - Mattie 994
    - Nimmie 968
      - Sam Weller 271
      - Nora 956

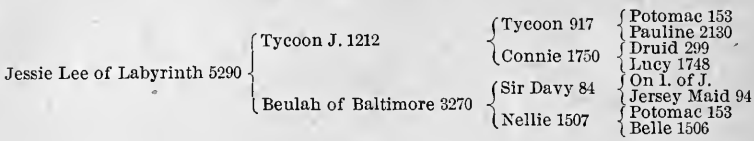
Sal Soda 3721.—Yield of butter, 14 lbs. 7 oz.; property of W. L. & W. Rutherford, Waddington, N. Y.

- Sal Soda 3721
  - Sam 980
    - On I.
    - Eugenie 792, imp.
  - Hattie 2d 2901
    - Bill Jr. 182
      - Bill 50
      - Hattie 428
    - Hattie or the Large Cow 428, imp.

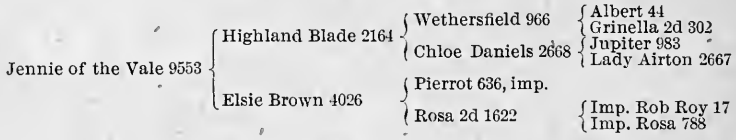
Monmouth Duchess 3895.—Yield of butter, 14 lbs. 7 oz., unsalted; test made June 1 to 7, 1876; property of W. A. Conway, Hackettstown, N. J.

- Monmouth Duchess 3895
  - Hector 129
    - Prince Albert 119, imp.
    - Victoria 249, imp.
  - Julia 3893
    - Sir Charles 131, imp.
    - Mary Lowndes 273, imp.

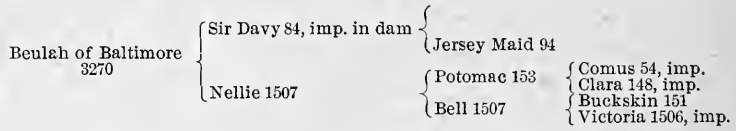
Jessie Lee of Labyrinth 5290.—Yield of butter, 14 lbs. 7 oz.; age when made, 4 yrs.; property of James Crook, Jacksonville, Ala.



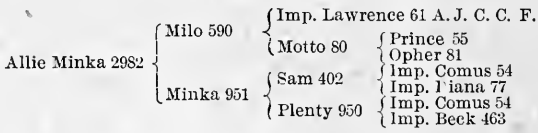
Jennie of the Vale 9553.—Yield of milk, 272 lbs.; yield of butter, 14 lbs. 6½ oz., salted; test made April 21 to 28, 1883; age when made, 4 yrs. 4 mos.; property of H. W. Douglas, Pevely, Mo.



Beulah of Baltimore 3270.—Yield of butter, 14 lbs. 6½ oz., salted; test made May 25 to May 31, 1880; age when made, 7 yrs. 4 mos.; property of Clarke & Jones, Baltimore, Md.



Allie Minka 2982.—Yield of milk, 208 lbs. 8 oz.; yield of butter, 14 lbs. 6½ oz., salted 1 oz. to lb.; test made Sept. 13 to 19, 1882; age when made, 8 yrs. 9 mos.; property of Campbell Brown, Spring Hill, Tenn.



Feed—3 lbs. wheat bran, 6 lbs. cornmeal, 2 lbs. cottonseed meal, daily.

Irene of Short Hills 5137.—Yield of milk, 237 lbs. 8 oz.; yield of butter, 14 lbs. 6½ oz.; test made March 14 to 20, 1882; age when made, 5 yrs. 9 mos.; property of Campbell Brown, Spring Hill, Tenn.

- Irene of Short Hills 5137
  - Okubo 1876
    - Imp. Lawrence 61, A. J. C. C. F. S. 84 J. H. B.
    - Imp. Mazie 1588
  - Jarto 1902
    - Duke of Shrewsbury 624
      - Comet 130
      - Jersey Belle No. 2 1527
    - May Maitland 1590
      - Suffolk 607
      - Imp. English Beauty 449

Mary of Bear Lake 6171.—Yield of butter, 14 lbs. 7 oz.; test made middle of December, 1880; age when made, 4 yrs.; property of Chester Bordwell, Cambridge, O.

- Mary of Bear Lake 6171
  - Prince of Warren 1512
    - Southampton 117, imp.
    - Golddrop 222, imp.
  - Warren's Duchess 4622
    - Optimus 1607
      - Sir Charles 131
      - Carrie 3894
    - Countess of Warren 3896
      - Hector 129
      - Julia 3893

Lobelia 2d 6650.—Yield of butter, 14 lbs. 6 oz., salted; test made June 14 to 20, 1883; age when made, 8 yrs. 7 mos.; property of R. S. Kingman, Sparta, Wis.

- Lobelia 2d 6650
  - Burnside 1234
    - Hughes 954
      - I. of J.
      - Daffy 2522
    - Clematis 3174
      - Clifton 6, imp.
      - Crocus 3173
  - Lobelia 4379
    - Clifton 6, imp.
    - Lupin 1972
      - Bashan 32
      - Lily 1991

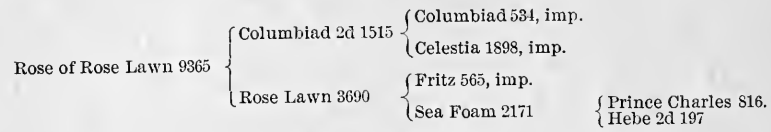
Feed—None; pasture, timothy and clover.

Jazel's Maid 11011.—Yield of milk, 250 lbs. 11 oz.; yield of butter, 14 lbs. 6 oz., unsalted; test made May 22 to 28, 1883; age when made, 3 yrs. 9 mos.; property of Thos. H. Malone, Nashville, Tenn.

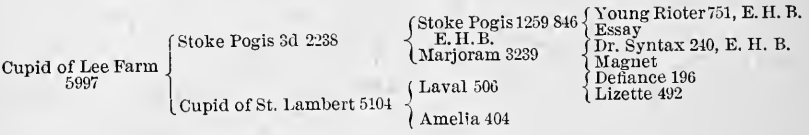
- Jazel's Maid 11011
  - Jazel 159 F. S. 3501, A. J. C. C.
    - Duke 76 F. S.
      - Merry Boy 61 P. S.
    - Flying 18 F. S.
  - Maid of Avranches 6959, imp.
    - Tommy on I. of J.
    - Grey Queen 571 F. S.

Feed—5 qts. cornmeal, 2 qts. bran, daily; pasture, bluegrass, very good.

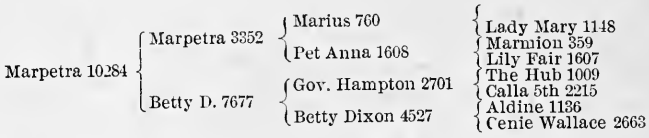
Rose of Rose Lawn 9365.—Yield of milk, 225 lbs. 7 oz.; yield of butter, 14 lbs. 6 oz., salted 1 oz. to lb.; test made Aug. 13 to 20, 1883; age when made, 6 yrs. 1 mo.; property of J. S. Rogers, Paterson, N. J.



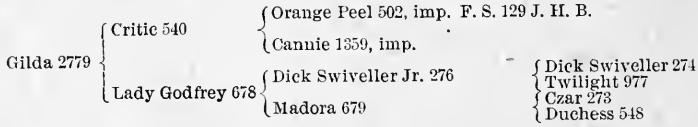
Cupid of Lee Farm 5997.—Yield of milk, 199 lbs. 8 oz.; yield of butter, 14 lbs. 6 oz., unsalted; test made July 16 to 22, 1882; age when made, 5 yrs. 3 mos.; property of D. A. Givens, Cynthiana, Ky.



Marpetra 10284.—Yield of milk, 261 lbs.; yield of butter, 14 lbs. 6 oz.; test made Jan. 24 to 30, 1883; age when made, 2 yrs. 10 mos.; property of C. E. Douglass, Crockett, Tex.



Gilda 2779.—Yield of butter, 14 lbs. 6 oz.; test made 1875; age when made, 3 yrs.; property of Wm. H. Hayden, Albany, Vt.



Myth 2837.—Yield of milk, 248 lbs.; yield of butter, 14 lbs. 6 oz.; test made May 22 to 28, 1881; age when made, 7 yrs.; property of Edward Worth, Wawa, Pa.

- Myth 2837
  - Count Bismark 732
    - On I.
    - Lucy 1827
  - Damsel 2d 1837
    - St. Malo 486, imp.
    - Damsel 1828, imp.

Palestine's Last Daughter 12602.—Yield of butter, 14 lbs. 6 oz.; test made June 1 to 8, 1881; age when made, 4 yrs.; property of Thos. Fitch, New London, Conn.

- Palestine's Last Daughter 12602
  - Pierrot 7th 1667
    - Pierrot 636, imp.
    - Pet 811, imp.
  - Palestine 26, imp.

Angerez Girl 17015.—Yield of butter, 14 lbs. 6 oz., unsalted; test made January, 1883; age when made, 3 yrs. 8 mos.; property of S. W. Robbins, Wethersfield, Conn.

Augerez Girl 17015, imp.

Lady Clarendon 3d 17578.—Yield of butter, 14 lbs. 5½ oz., salted; test made May 28 to June 4, 1883; age when made, 3 yrs. 10 mos.; property of J. Horatio Earl, Skaneateles, N. Y.

- Lady Clarendon 3d 17578, A. J. C. C.
  - Camerlengo 3012
    - Signal 1170
      - Marius 760
      - Pansy Morris 2060
    - Maiden of Jersey 2736, imp.
  - Lady Clarendon 7030, imp.

Memento 1913.—Yield of milk, 235 lbs.; yield of butter, 14 lbs. 5 oz., salted; test made Aug. 21 to 28, 1883; age when made, 11 yrs. 7 mos.; property of Thomas Beer, Bucyrus, Ohio.

- Memento 1913
  - Lawrence 61, imp.
    - Clementine 232 F. S.
  - Motto 80
    - Prince 55
      - Commodore 56
      - Duchess 82
    - Ophir 81
      - Prince 55
      - Duchess 2d 83

Milkmaid of Burr Oaks 9035.—Yield of milk, 236 lbs. 2 oz.; yield of butter, 14 lbs. 5 oz., salted; test made Aug. 26 to Sept. 1, 1883; age when made, 5 yrs. 4 mos.; property of T. Bacon, Wauconda, Ill.

- Milkmaid of Burr Oaks 9035
  - Ike Fetch 1292
    - Critic 540
      - Orange Peel 502, 129 F. S.
      - Cannie 1359
    - Maid of Judah 2429, imp.
  - Milkmaid of Lake Forest 5010
    - Phenomenon 1147
      - Excelsior of Jersey 949
      - Tilly 2408
    - Lilly Lee 2421
      - Metacomet 215
      - Nettlesome 2407

Roselaine 7167.—Yield of milk, 236 lbs. 10 oz.; yield of butter, 14 lbs. 5 oz., salted $\frac{3}{4}$ oz. to lb.; test made April 29 to May 5, 1882; age when made, 4 yrs. 1 mo.; property of A. Garrettson, Pendleton, Ind.

- Roselaine 7167
  - Grand Duke Alexis 1040, imp.
    - On I. of J.
    - Victorine La Chaise 2740, imp.
  - Rosa Gamp 2732, imp.
    - Victoria Gamp 1446

Nancy of St. Lambert 12964.—Yield of milk, 180 lbs. 8 oz.; yield of butter, 14 lbs. 5 oz., salted; test made Nov. 26 to Dec. 2, 1883; age when made, 3 yrs. 10 mos.; property of V. E. Fuller, Hamilton, Ont.

- Nancy of St. Lambert 12964
  - Stoke Pogis 3d 2238
    - Stoke Pogis 1259
    - Marjoram 3239
  - Lucy of St. L.
    - Victor Hugo 197
    - Lydia 495

Feed—8 lbs. bran, 8 lbs. crushed oats; mangolds and hay.

Minnie of Scituate 17829.—Yield of milk, 251 lbs.; yield of butter, 14 lbs. 4½ oz., salted; test made Dec. 24 to 31, 1883; age when made, 5 yrs. 7 mos.; property of Orestes Pierce, East Baldwin, Me.

- Minnie of Scituate 17829
  - Duke of Scituate 3623
    - Pharos Jr. 3621
      - Pharos 3552
      - Blonde 378
    - Jersey Belle of Scituate 7628
      - Victor 3550
      - Jenny 7827
  - Minnie 2d 17828
    - Victor 3550
      - Pilot 3549
      - Minnie 7826
    - Minnie 7826
      - Dick Swiveler Jr. 276
      - Dove 7824

Feed—4 qts. bran, 2 cornmeal, 1 cottonseed meal.

Denise 8281.—Yield of milk, 170 lbs. 8 oz.; yield of butter, 14 lbs. 4½ oz., salted 1 oz. to lb.; test made Nov. 23 to 29, 1883; age when made, 4 yrs. 7 mos.; property of Campbell Brown, Spring Hill, Tenn.

- Denise 8281
  - Top Sawyer 1404
    - Marius 760
      - Willie Boy 432
      - Imp. Lady Mary 1148
    - Imp. Emblem 90
      - Imp. Clement 115
  - Imp. Lucy 4577
    - Tim F. S. 112 J. H. B.
    - Bourgeoise F. S. 442 J. H. B.

Violet of Glencairn 10221.—Yield of milk, 219 lbs.; yield of butter, 14 lbs. 4 oz., salted 1 oz. to lb.; test made July 13 to 20, 1883; age when made, 3 yrs. 4 mos.; property of V. E. Fuller, Hamilton, Ont.

- Violet of Glencairn 10221
  - Fortunatus 1152
    - Mogul 532, imp.
    - Juniata 1289
      - Cadmus 4, imp.
      - Danae 3d 1287
  - Mollie Burn 7831
    - Lopez 313, imp.
      - On I. of J.
      - Amy 395, imp.
    - Patterson's Beauty 4760
      - Ariene 1071, imp.

Feed—12 qts. daily ground oats; pasture, clover.

Rosy Kate 10276.—Yield of milk, 224 lbs. 8 oz.; yield of butter, 14 lbs. 4 oz.; test made Feb. 16 to 22, 1881; age when made, 4 yrs. 9 mos.; property of Hoover & Co., Columbus, Ohio.

- Rosy Kate 10276
  - Pierrot 2d 1669
    - Pierrot 636, imp.
    - Dainty 796, imp.
  - Rose of Mashamoquet Farm 6472
    - Pierrot 2d 1669
      - Pierrot 636
      - Dainty 796
    - Palestine 26, imp.

Blonde 2d 9228.—Yield of milk, 204 lbs.; yield of butter, 14 lbs. 4 oz., salted; test made Sept. 7 to 13, 1883; age when made, 7 yrs. 8 mos.; property of Wm. Rolph, Markham, Ont.

- Blonde 2d 9268
  - Khedive P. S. 103 J. H. B.
    - Leo 198, H. C. J. H. B.
    - Coomassie 1442, H. C. J. H. B.
  - Blonde F. S. 214 J. H. B.

Buckeye Lass 10355.—Yield of milk, 208 lbs. 15 oz.; yield of butter, 14 lbs. 4 oz., salted; test made April 15 to 21, 1882; age when made, 5 yrs.; property of S. L. Hoover, Columbus, Ohio.

Buckeye Lass 10355 { Dick 181, F. S. H. C. J. H. B.
Fairy 964, J. H. B. F. S. H. C.

Adina 1942.—Yield of milk, 234 lbs.; yield of butter, 14 lbs. 4 oz., salted; test made May 2 to 9, 1881; age when made, 9 yrs.; property of Jas. Cloud & Son, Kennett Square, Pa.

Adina 1942 { Czar 251 { Pilot Boy 488 { Pilot 3 / Marigold 840
Wanda 1423 { Pilot 3 / Flora 1422
Irma 1298 { Charleston 1 { On I. of J. / Princess 836
Buttercup 845 { Charleston 1 / Elsie 837

Jeannie Platt 6005.—Yield of milk, 120⅞ lbs.; yield of butter, 14 lbs. 4 oz., salted; test made July 31 to Aug. 6, 1882; age when made, 5 yrs. 4 mos.; property of Lyman A. Mills.

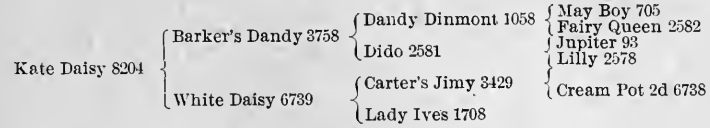
Jeannie Platt 6005 { Rex 1330 { Colt Jr. 825 { Rob Roy 17 / Maggie 2054
Couch's Lily 3237 { Albert 44 / Lily Dale 3236
Jule 3640 { St. Helier 45, imp.
Josie 2d 2712 { Arab 245 / Josie 2711, imp.

Vespucia 17455.—Yield of butter, 14 lbs. 4 oz., salted; test made Oct. 11 to 18, 1883; age when made, 3 yrs. 7 mos.; property of A. J. Fish, Van Wert, Ohio.

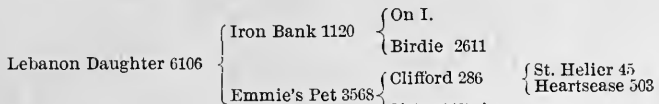
Vespucia 17455 { Indiaman 2071 { Vespucius 758 { Vesper Lass 1784
Ibex 2724
Fenelle 9095 { Indiaman 2071 { Vespucius 758 / Ibex 2724
Carie 1366 { Jerry 2d 513 / Clara 1010

Feed—A slop of 2 gals. wheat bran and cut sheaf oats, twice daily; pasture, clover and timothy, second crop.

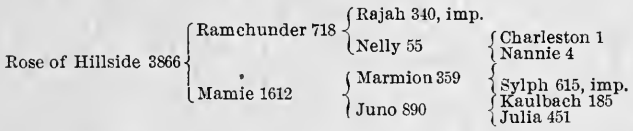
Kate Daisy 8204.—Yield of milk, 276 lbs. 4 oz.; yield of butter, 14 lbs. 4 oz., salted; test made Oct. 20 to 26, 1883; property of L. M. Fair, Wallingford, Conn.



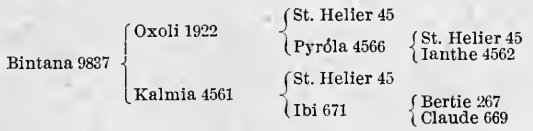
Lebanon Daughter 6106.—Yield of milk, 16 to 18 qts. daily; yield of butter, 14 lbs. 4 oz.; test made Dec. 10 to 16, 1881; age when made, 5 yrs. 9 mos.; property of G. Dawson Coleman, Brickerville, Pa.



Rose of Hillside 3866.—Yield of milk, 152 lbs. 9 oz.; yield of butter, 14 lbs. 3½ oz., salted 1 oz. to lb.; test made Dec. 23 to 30, 1883; age when made, 9 yrs. 6 mos.; property of Charles J. Reed, Fairfield, Iowa.



Bintana 9837.—Yield of milk, 183 lbs. 15 oz.; yield of butter, 14 lbs. 3½ oz.; test made April 15 to 22, 1880; age when made, 3 yrs.; property of Joseph Gavin, Chester, N. Y.



Pride of Winslow 2613.—Yield of butter, 14 lbs. 3 oz.; property of G. Dawson Coleman, Brickerville, Pa.

Pride of Winslow 2613, imp. September, 1871, by A. M. Herkness, Phil.

Gem of Sassafras 8434.—Yield of milk, 253 lbs. 12 oz.; yield of butter, 14 lbs. 3½ oz., salted ½ oz. to lb.; test made May 25 to 31, 1882; age when made, 4 yrs. 3 mos.; property of T. Howard Wilson, Lebanon, Del.

- Gem of Sassafras 8434
  - Duke of Sassafras 2431
    - Rossman 1128
      - Pilot Jr. 141
      - Rosa 122, imp.
    - Kizzie 3344
      - Tom Dasher 420
      - E. Colt's Daisy No. 2, 3343
  - Belle of Kent 4371
    - Hurd's Ivanhoe 1522
      - Zany 551
      - Blooming Beauty 2584
    - Kizzie 3344
      - Tom Dasher 420
      - E. Colt's Daisy No. 2, 3343

Sweet Briar of St. Lambert 5481.—Yield of milk, 267 lbs.; yield of butter, 14 lbs. 3 oz., salted 1 oz. to lb.; test made June 6 to 12, 1883; age when made, 7 yrs. 1 mo.; property of David Reesor, Rosedale, Toronto.

- Sweet Briar of St. L. 5481
  - Lord Lisgar 1066
    - Victor Hugo 197, imp.
    - Pauline 494, imp.
  - Lily 5120
    - Laval 506
      - Defiance 196, imp.
      - Lisette 492, imp.
    - Pride of Windsor 438

Adora 18569.—Yield of milk, 294½ lbs.; yield of butter, 14 lbs. 3 oz., salted ¾ oz. to lb.; test made May 21 to 27, 1883; age when made, 3 yrs. 8 mos.; property of Wm. E. Oates, Vicksburg, Miss.

- Adora 18569
  - The Hub 1009
    - Motley 515
      - Jack Horner 514, imp.
      - Meg Merrilies 1372, imp.
    - Bessie 139, imp.
  - Sunny South 6830
    - Proxy 1714
      - Pertinatti 713
      - Roxana 1761
    - Effie of Staatsburg 3194
      - Yankee 1003, imp.
      - Emma 2d 2256

Lillian Mostar 10364.—Yield of milk, 219 lbs. 12 oz.; yield of butter, 14 lbs. 3 oz., salted; test made April 1 to 8, 1883; age when made, 4 yrs.; property of Jas. Cloud & Son, Kennett Square, Pa.

- Lillian Mostar 10364
  - Diamond Earl 3116
    - Longfellow 818
      - Tancred 501
      - Undine of Oyster Bay 1738
    - Favorite of Queen's County 2825
      - Castor 686
      - Pattie of Q.'s Co. 1785
  - Mostar 6971
    - Clifton Dell 1117
      - Gray Friar 567
      - Lady Bowen 354
    - Linda 3d 3219
      - Pilot Boy 488
      - Linda 846

Litza 6338.—Yield of milk, 268 lbs. 4 oz.; yield of butter, 14 lbs. 3 oz., salted; test made July 24 to 30, 1883; age when made, 5 yrs. 10 mos.; property of Mary B. Adams, Aberdeen, Miss.

- Litza 6338
  - Top Sawyer 1404
    - Marius 760
      - Willie Boy 434
      - Imp. Lady May 1148
    - Imp. Emblem 90
      - Imp. Clement 115
      - On I. of J.
  - Roxana 2d 2532
    - Mack 722
      - Imp. Clement 115
      - Sunflower 351
    - Roxana 1761
      - Roxbury 247
      - Cowslip 5th 849

Clematis of St. Lambert 5478.—Yield of milk, 285 lbs.; yield of butter, 14 lbs. 3 oz., salted; test made May 2 to 8, 1882; age when made, 6 yrs.; property of W. R. Markham.

- Clematis of St. Lambert 5478
  - Lord Lisgar 1066
    - Victor Hugo 197, imp.
    - Pauline 494, imp.
  - Snowdrop of St. Lambert 5119
    - Defiance 196, imp.
    - Lydie 495, imp.

Celia Belle 5865.—Yield of milk, 246 lbs. 4 oz.; yield of butter, 14 lbs. 3 oz.; test made June 6 to 12, 1883; age when made, 6 yrs. 7 mos.; property of Campbell Brown, Spring Hill, Tenn.

- Celia Belle 5865
  - Duke of Portage 1270
    - Major of Staatsburg 679
      - Imp. Napoleon 291
      - Imp. Minnie 771
    - Lady Palestine 2769
      - Imp. Jersey Prince 1062
      - Palestine 2d 1455
  - Belle of Chester 4442
    - Hampton 491
      - Black Imperial 255
      - Lightfoot 461
    - Beauty 3159
      - Sam 402
      - Henrietta 465

Lilly Cross 13796.—Yield of milk, 287 lbs. 8 oz.; yield of butter, 14 lbs. 3 oz., salted; test made Jan. 1 to 7, 1883; age when made, 7 yrs. 6 mos.; property of E. A. Flagg, West Hartford, Conn.

- Lilly Cross 13796
  - Hector 791
    - Blucher 48
    - Daisy 571
  - Lilly Burnside 4384
    - Burnside 1234
      - Hughes 954
      - Clematis 3174
    - Milkweed 1977
      - Hector 791
      - Lupin 1972

Telka 8037.—Yield of butter, 14 lbs. 3 oz.; property of W. R. McCready, Saugatuck, Conn.

- Telka 8037, imp.
  - On I.
  - Duchess J. H. B. 935

Prince's Bloom 9729.—Yield of butter, 14 lbs. 3 oz.; property of E. J. Robbins, Wethersfield.

- Prince's Bloom 9729
  - Prince of Croton 2490
    - Tocsin 1912
    - Glenida 4436, imp.
  - Bloom 2d 5927
    - Jersey King 879
      - Albert 44
      - Grinella 1302
    - Bloom 4062
      - Monitor 878
      - Calla 4th 2208

Turquoise 1129.—Yield of butter, 14 lbs. 3 oz.; property of John D. Wing, Millbrook, N.Y.

- Turquoise 1129
  - Lawrence 61, imp.
  - Topaz 75
    - Comus 54
      - On I.
      - Dianna 77
    - Pearl 76
      - On I.
      - Faith 78

Safrano 4568.—Yield of milk, 180 lbs. 8 oz.; yield of butter, 14 lbs. 2½ oz.; test made Oct. 24 to 30, 1881; age when made, 8 yrs.; property of Chas. Keep, Lockport, N.Y.

- Safrano 4568
  - St. Helier 45, imp.
  - Kalmia 4561
    - St. Helier 45
    - Ibi 671
      - Bertie 267
      - Claude 669

Maggie May 3255.—Yield of milk, 235 lbs. 8 oz.; yield of butter, 14 lbs. 2½ oz., salted; test made March 21 to 27, 1882; age when made, 8 yrs. 2 mos.; property of W. B. Montgomery, Starkville, Miss.

- Maggie May 3255
  - Nelusko 479
    - Rajah 340
    - Nelly 55
      - Charleston 1
      - Nannie 4
  - Lucky Belle 2214
    - Albert 44
      - Jerry 15
      - Frankie 17
    - Pansy 6th 38
      - Patterson 11
      - Pansy 8

Lily of Staatsburg 5427.—Yield of butter, 14 lbs. 2¼ oz., unsalted; test made June 15 to 22, 1883; age when made, 8 yrs.; property of W. B. Dinsmore, Staatsburg, N. Y.

Lily of Staatsburg 5427, imp.

Pearl of St. Lambert 5527.—Yield of milk, 247 lbs. 8 oz.; yield of butter, 14 lbs. 2 oz., salted 1 oz. to lb.; test made April 4 to 10, 1882; age when made, 6 yrs.; property of Wm. Ralph, Markham, Ont., Can.

- Pearl of St. Lambert 5527
  - Buffer 2035
    - Lord Monck 304
      - Victor Hugo 197, imp.
      - Pride of Windsor 483, imp.
    - Amelia 484, imp.
  - Dot of St. L. 5525
    - Laval 506
      - Defiance 196, imp.
      - Lisette 492, imp.

Webster's Pet 4103.—Yield of milk, 197 lbs.; yield of butter, 14 lbs. 2 oz., salted; test made Jan. 15 to 22, 1881; age when made, 6 yrs.; property of W. H. Walrath, Clayton, N. Y.

- Webster Pet 4103
  - Champion of America 1567
    - May Boy 75
      - Bismark 292, imp.
      - Croesus 1787
    - Baury 1019
      - Livingstorm 173
      - Dolly 2d 1020
  - Churchill Betsey 4105
    - Phil Sheridan 984
      - Livingstorm 173
      - Belle 1225
    - Sutliff's Rosa 4104
      - Russ's Sam 1709
      - Dolly 2d 1020

Feed—5 lbs. of oatmeal and 2 lbs. of cornmeal daily; hay.

Queen of Prospect 11997.—Yield of milk, 225 lbs. 8 oz.; yield of butter, 14 lbs. 2 oz., salted; test made June 21 to 27, 1883; age when made, 3 yrs. 3 mos.; property of R. S. Kingman, Sparta, Wis.

- Queen of Prospect 11997
  - Shirly 1613
    - Mogul 532, imp.
    - Niobe 4th 509
      - Iron Duke 18
      - Niobe 99, imp.
  - Adeline 9115, imp.

Feed—None: pasture, timothy and clover.

Bella Delaine 10356.—Yield of milk, 222 lbs. 1 oz.; yield of butter, 14 lbs. 2 oz., salted; test made April 15 to 21, 1883; age when made, 4 yrs.; property of S. L. Hoover, Columbus, Ohio.

- Bella Delaine 10356
  - Music 118 J. H. B. P. S. C.
    - Orange Skin 227 J. H. B. F. S. C.
    - Margotten 1042 J. H. B. F. S. C.
  - Daisey 742 J. H. B. C. F. S.

Queen Fannie 10275.—Yield of milk, 220 lbs.; yield of butter, 14 lbs. 2 oz., in 7 days; test made Jan. 2 to 8, 1881; age when made, 4 yrs. 10 mos.; property of Hoover & Co., Columbus, O.

- Queen Fannie 10275
  - Pierrot 2d 1669
    - Pierrot 636, imp.
    - Dainty 796, imp.
  - Fanny Landseer 1969
    - Landseer 331
      - On I. of J.
      - Dazzle 379
    - Sylph 615, imp.

Rarity 2d 7724.—Yield of milk, 199 lbs.; yield of butter, 14 lbs. 2 oz., in seven days; test made Dec. 9 to 17, 1881; age when made, 4 yrs.; property of Louis Stracke, Warsaw, Ill.

- Rarity 2d 7724
  - Flash 2532
    - Pierrot 636, imp.
    - Belle of Farmington 911, imp.
  - Rarity 5923
    - Jersey King 879
    - Lady Love 2d 2212

Nellie 1507.—Yield of butter, 14 lbs. 2 oz., salted; test made June 26 to July 2, 1876; age when made, 9 yrs. 1 mo.; property of Clarke & Jones, Baltimore, Md.

- Nellie 1507
  - Potomac 153
    - Comus 54
      - On Island of Jersey
      - Diana 77
    - Clara 148, imp.
  - Bell 1506
    - Buckskin 151
      - Prince John 22
      - Custard 321, imp.
    - Victoria 1505, imp.

Grace Davy 8292.—Yield of milk, 191 lbs. 1 oz.; yield of butter, 14 lbs. 2 oz., salted; test made Nov. 6 to 13, 1882; age when made, 6 yrs. 2 mos.; property of Mrs. Geo. M. Jewett, Zanesville, O.

- Grace Davy 8292
  - Young Sir Davy 3034
    - Young Davy 661
      - Imp. Sir Davy 84
      - Imp Georgetta 93
    - Susan 1658
      - Imp. Hannibal 618
      - Imp. Ariel 516
  - Imp. Grace Darling 2d 304
    - Imp. Excelsior of Jersey 949
    - Imp. Grace Darling 299

Nightingale of Elmarch 8312.—Yield of milk, 196 lbs.; yield of butter, 14 lbs. 2 oz., unsalted; test made June 21 to 27, 1881; age when made, 7 yrs. property of D. A. Givens, Cynthiana, Ky.

- Nightingale of Elmarch 8312
  - Merry Boy on I. of J.
  - Nellie on I. of J.

Angela 1682.—Yield of butter, 14 lbs. 2 oz., in 7 days; property of Silas Betts, Camden, N. J.

- Angela 1682
  - Roxbury 247
    - Commodore 229, imp.
      - Major 75
      - Flora 808
    - Rose 709
  - Europa 121, imp.

Therese M. 8364.—Yield of butter, 14 lbs. 2 oz., in seven days; property of W. B. Montgomery, Starkville, Miss.

- Therese M. 8364
  - Champion of America 1567
    - May Boy 705
      - Bismarck 292
      - Crocus 1787
    - Pansy 1019
      - Living Storm 173
      - Dolly 2d 1020
  - Julia Evelyn 6007
    - Aldine 1136
      - Nclusko 479
      - Gazelle of Mobile 1735
    - Mink 2d 3890
      - The Hub 1009
      - Mink 2548

Lebanon Lass 6108.—Yield of milk, average of 18 qts.; yield of butter, 14 lbs. 2 oz., in seven days; test made Dec. 2 to 8, 1881; age when made, 5 yrs. 8 mos.; property of G. Dawson Coleman, Brickerville, Pa.

- Lebanon Lass 6108
  - Iron Bank 1120
    - On I. of J.
    - Birdie 2611, imp.
  - Tipsey 3572
    - Clifford 286
      - St. Helier 45
      - Heartsease 503
    - Florie 2610, imp.

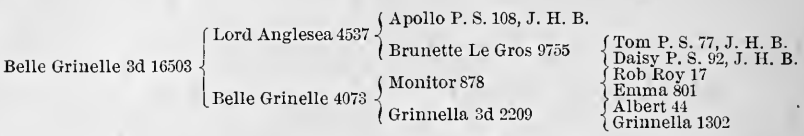
Bessie Bradford 7269.—Yield of butter, 14 lbs. 2 oz., salted; test made Nov. 4 to 11, 1883; age when made, 7 yrs. 8 mos.; property of L. S. Sprague, Austerlitz, N. Y.

- Bessie Bradford 7269
  - King Pin 1878
    - Mercury 432
      - Jupiter 93
      - Alphea 171
    - Edna 3d 568
      - Jupiter 93
      - Edna 807
  - Edith 4th 817
    - Mars 95
      - Jupiter 93
      - Edna 807
    - Edith 3d 806
      - Jupiter 93
      - Edith 167

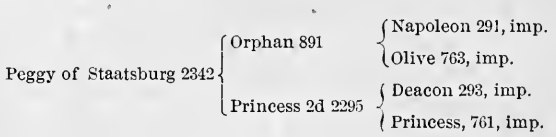
Lady Gray of Hilltop 3d 14642.—Yield of milk, 253 lbs. 4 oz.; yield of butter, 14 lbs. 2 oz., salted; test made June 5 to 11, 1883; age when made, 3 yrs. 6 mos.; property of L. M. Fair, Wallingford, Conn.

- Lady Gray of Hilltop 3d 14642
  - Champion of Hill Top 1839
    - Champion of A 1567
      - May Boy 705
      - Pansy 1019
    - Kate Nickleby 3100
      - Tom Dasher 420
      - Bessie Hurd 3099
  - Lady Gray of Hilltop 6850
    - Wethersfield 966
      - Albert 44
      - Grinella 2d 1303
    - Bess Lena 3349
      - Sam 980
      - Lena 3347

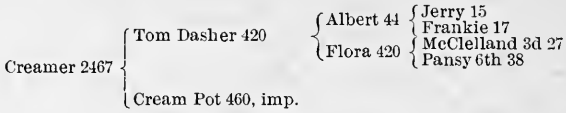
Belle Grinelle 3d 16503.—Yield of butter, 14 lbs. 2 oz.; property of E. J. Robbins, Wethersfield, Conn.



Peggy of Staatsburg 2342.—Yield of butter, 14 lbs. 1¼ oz., unsalted; test made June 22 to 29, 1883; age when made, 10 yrs. 10 mos.; property of W. B. Dinsmore, Staatsburg, N. Y.



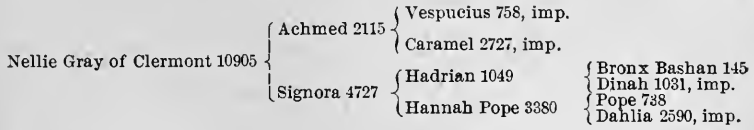
Creamer 2467.—Yield of milk, 167 lbs. 13 oz.; yield of butter, 14 lbs. 1 oz., salted; test made June 5 to 12, 1882; age when made, 9 yrs. 10 mos.; property of D. B. De Wolf, Lee, Mass.



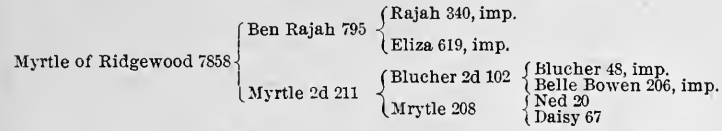
Robinette 7114.—Yield of milk, 233 lbs. 4 oz.; yield of butter, 14 lbs. 1 oz., unsalted; test made April 17 to 23, 1883; age when made, 5 yrs.; property of A. B. Darling, Ramsey's, N. J.

Feed.—Three quarts of corn, three of bran, daily.

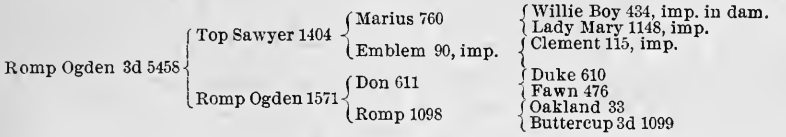
Nellie Gray of Clermont 10905.—Yield of butter, 14 lbs. 1 oz., salted; test made May 15 to 22, 1883; age when made, 5 yrs. 1 mo. 5 days; property of D. A. Smalley, Milford.



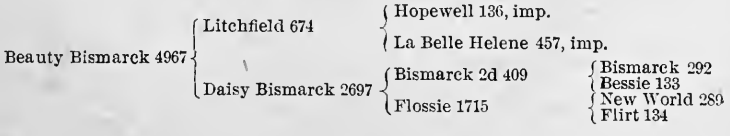
Myrtle of Ridgewood 7858.—Yield of milk, 184 lbs.; yield of butter, 14 lbs. 1 oz., salted $\frac{1}{3}$ oz. to lb.; test made Nov. 6 to 12, 1882; age when made, 4 yrs. 2 mos.; property of Chas. R. Christy, Stamford, Conn.



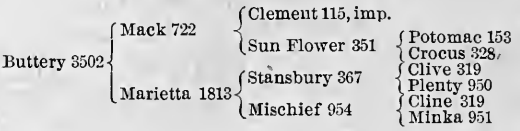
Romp Ogden 3d 5458.—Yield of milk, 251 lbs. 8 oz.; yield of butter, 14 lbs. 1 oz., salted; test made July 9 to 15, 1881; age when made, 4 yrs. 6 mos.; property of Campbell Brown, Spring Hill, Tenn.



Beauty Bismarck 4967.—Yield of butter, 14 lbs. 1 oz. in 7 days; test made in 1880; age when made, 5 yrs.; property of F. F. Fuessinich, Torrington, Conn.

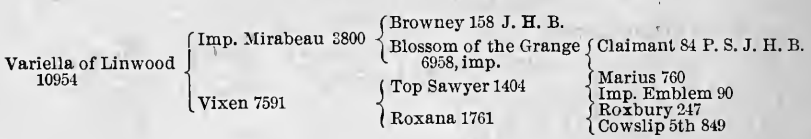


Buttery 3502.—Yield of milk, 203 lbs.; yield of butter, 14 lbs. 1 oz., salted; test made Jan. 22 to 28, 1882; age when made, 7 yrs. 9 mos.; property of Campbell Brown, Spring Hill, Tenn.

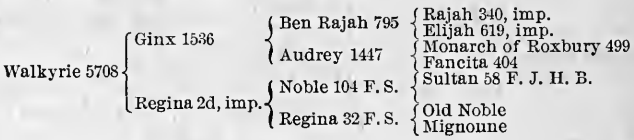


Cow has one quarter of her udder spoiled.

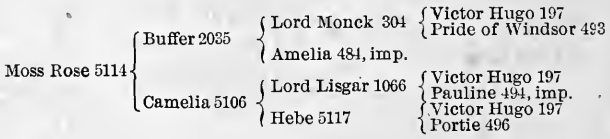
Variella of Linwood 10954.—Yield of milk, 228 lbs. 2 oz.; yield of butter, 14 lbs. 1 oz., unsalted; test made Aug. 17 to 24, 1883; age when made, 3 yrs. 4 mos.; property of M. M. Gardner, Nashville, Tenn.



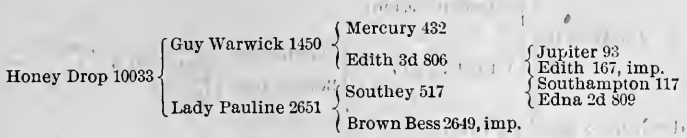
Walkyrie 5708.—Yield of milk, 169 lbs. 12 oz.; yield of butter, 14 lbs. 1 oz., salted; test made Sept. 27 to Nov. 8, 1883; age when made, 6 yrs. 5 mos.; property of H. M. Howe, Bristol, R. I.



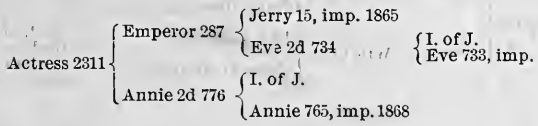
Moss Rose 5114.—Yield of milk, 208 lbs.; yield of butter, 14 lbs. ½ oz., unsalted; test made July 2 to 8, 1883; age when made, 8 yrs. 3 mos.; property of Wm. Ralph, Markham, Ont., Can.



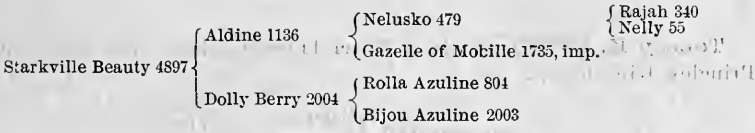
Honey Drop 10033.—Yield of milk, 236 lbs. 12 oz.; yield of butter, 14 lbs. ½ oz., unsalted; test made May 1 to 7, 1883; age when made, 6 yrs.; property of A. B. Darling, Ramsey's, N. J.



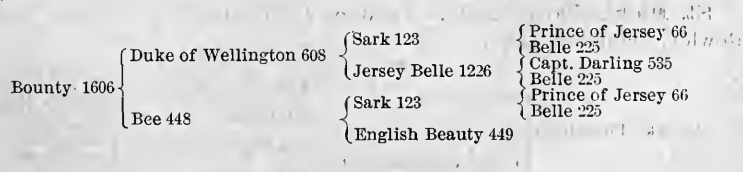
Actress 2311.—Yield of butter, 14 lbs., unsalted; test made Dec. 24 to 31, 1882; age when made, 10 yrs. 9 mos.; property of W. B. Dinsmore, Staatsburg, N. Y.



Starkville Beauty 4897.—Yield of milk, 185 lbs.; yield of butter, 14 lbs., unsalted; test made July 10 to 16, 1883; age when made, 7 yrs. 5 mos.; property of W. B. Montgomery, Starkville, Miss.



Bounty 1606.—Yield of butter, 14 lbs., unsalted; test made in June, 1877; age when made, 9 yrs. 6 mos.; property of Beech Grove Farm, Beech Grove, Ind.



Feed—none; good pasture.

Pet Anna 1608.—Yield of butter, 14 lbs., unsalted; test made in June, 1877; age when made, 6 yrs. 2 mos.; property of Beech Grove Farm, Beech Grove, Ind.

- Pet Anna 1608
  - Marmion 359, imp.
  - Lillie Fair 1607
    - Clarence 596
      - Prince of Orange 184
      - Clara 1530
    - Bounty 1606
      - Duke of Wellington 608
      - Bee 448

Feed—None; good pasture.

Home Matron 6707.—Yield of milk, 153 lbs.; yield of butter, 14 lbs., salted; test made June 7 to 13, 1882; age when made, 5 yrs. 2 mos.; property of J. M. Hoover, Bradford, Ohio.

- Home Matron 6707
  - Duke of Lebanon 1880
    - Nye 667
      - Monmouth 210
      - Niobe 99
    - Nancy Dawson 1279, imp.
  - Lebanon's Wife 6102
    - Iron Bank 1120
      - On I. of J.
      - Birdie 2611, imp.
    - Sister Dorothy 2607
      - On I. of J.
      - Sister 14.7, imp.

Eugenie 2d 1623.—Yield of butter, 14 lbs.; property of S. C. Colt.

- Eugenie 2d 1623
  - Rob Roy 17, imp.
  - Eugenie 792, imp.

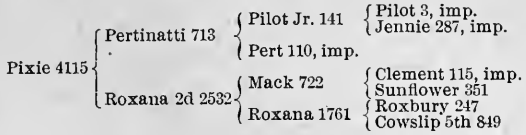
Topsey K. 22769.—Yield of butter, 14 lbs. in 7 days; property of Nathan Bringley, Kingsbury, N. Y.

- Topsey K. 22769
  - Napoleon 2d 527
    - Major 378
      - Comet 223
      - Duchess 550, imp.
    - Europa 558, imp.
  - Cora K. 22768
    - Major 378
      - Comet 223
      - Duchess 550, imp.
    - Beauty 719
      - Comet 223
      - Victoria 2d 718

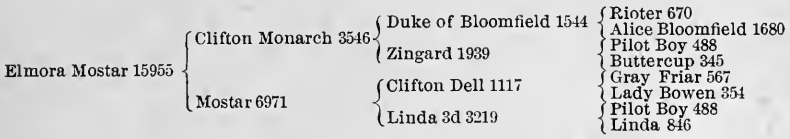
St. Nick's Flora 16195.—Yield of butter, 14 lbs.; property of G. C. Rowley, Blandford, Mass.

- St. Nick's Flora 16195
  - St. Nick 7224
    - Mercury 432
      - Jupiter 93
      - Alphea 171
    - Azile 1256
      - Southampton 117
      - Topsey 2d 814
  - Flora of Hopelands 16194
    - Lord Lonsdale 305
      - Premium 7
      - Duchess 2
    - Flora 981

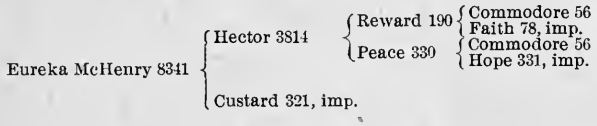
Pixie 4115.—Yield of milk, 184 lbs. 8 oz.; yield of butter, 14 lbs., salted; test made Dec. 7 to 13, 1881; age when made, 6 yrs. 6 mos.; property of Campbell Brown, Spring Hill, Tenn.



Elmora Mostar 15955.—Yield of milk, 213 lbs.; yield of butter, 14 lbs., unsalted; test made May 2 to 9, 1883; age when made, 2 yrs. 3 mos.; property of Jas. Cloud & Son, Kennett Square, Pa.



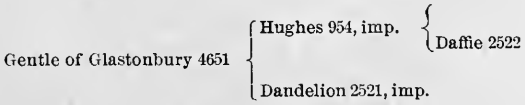
Eureka McHenry 8341.—Yield of butter, 14 lbs., unsalted; test made July 5 to 12, 1867; age when made, 7 yrs. 21 days; property of A. E. Kapp, Northumberland, Pa.



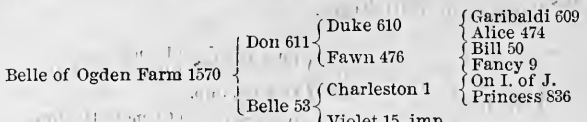
Lucilla 2735.—Yield of butter, 14 lbs. in 7 days; property of J. A. Hayt, Patterson, N. Y.

Lucilla 2735, imp.

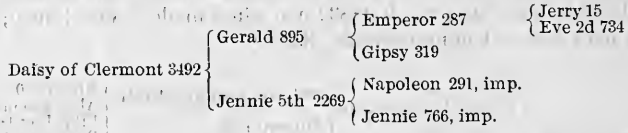
Gentle of Glastonbury 4651.—Yield of butter, 14 lbs. in 7 days; property of Jas. B. Williams, Glastonbury, Conn.



Belle of Ogden Farm 1570.—Yield of butter, 14 lbs. in 7 days; property of Jno. H. Freeman, Jackson, Tenn.



Daisy of Clermont 3492.—Yield of butter, 14 lbs. in 7 days; test made June 13 to 20, 1881; age when made, 7 yrs.; property of Edward L. Clarkson, Tivoli, N. Y.

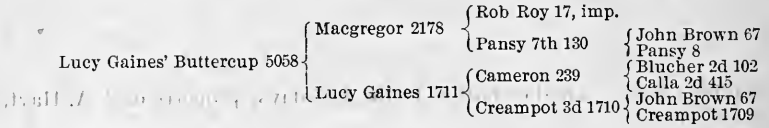


Fidelia 5817.—Yield of butter, 14 lbs. in 7 days; test made in 1881; property of Chas. L. Sharpless, Philadelphia, Pa.

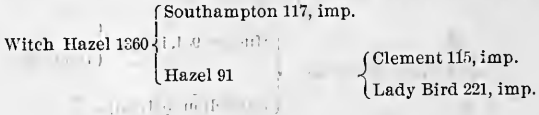
Fidelia 5817, imp.

On grass alone.

Lucy Gaines' Buttercup 5058.—Yield of milk, 229 lbs.; yield of butter, 14 lbs. in 7 days; test made June 3 to 9, 1881; age when made, 8 yrs.; property of A. H. Cooley, Newburgh, N. Y.



Witch Hazel 1360.—Yield of milk, a fraction over 10 qts. daily; yield of butter, 14 lbs. in 7 days; test made Dec. 1879; age when made, 9½ yrs.; property of Thos. J. Hand, Sing Sing, N. Y.



Kitty Clover 1113.—Yield of butter, 14 lbs. in 7 days; test made June 7 to 14, 1878; age when made, 11 yrs. 6 mos.; property of Jas. A. Hayt, Patterson, N. Y.

Kitty Clover 1113, imp.

St. Perpetua 2d 5557.—Yield of milk, 200 lbs.; yield of butter, 14 lbs. in 7 days; test made June 6 to 12, 1881; age when made, 4 yrs.; property of Thos. H. Malone, Nashville, Tenn.

- St. Perpetua 2d 5557
  - Pine Cliff 1106
    - Cliff 176
      - Dick Swiveller 159
      - Fanny 365, imp.
    - St. Catharine 408, imp.
  - St. Perpetua 3668
    - Rob Roy 17, imp.
    - Beauty 804, imp.

Countess of Warren 3896.—Yield of butter, 14 lbs. in 7 days; test made March, 1876; age when made, 5 yrs.; property of Chester Bordwell, Cambridge, Ohio.

- Countess of Warren 3896
  - Hector 129
    - Prince Albert 119, imp.
    - Victoria 249, imp.
  - Julia 3893
    - Sir Charles 131, imp.
    - Mary Lowndes 273, imp.

Morlacchi 2725.—Yield of butter, 14 lbs. in 7 days; property of Tennessee Hospital for Insane, Nashville, Tenn.

- Morlacchi 2725
  - Duke of Grayholdt 1035, imp.
  - Caramel 2727, imp.

Lady Brown 433.—Yield of butter, 14 lbs.; test made Dec., 1876; age when made, about 8 yrs.; property of S. W. Robbins, Wethersfield, Conn.

- Lady Brown 433
  - McClellan 4th 85
    - McClellan 25
      - Capt. Darling 535
      - Angelina Baker 13
    - Lily 1
  - Pansy 7th 130
    - John Brown 67
      - Prince John 22
      - Victoria 104
    - Pansy 8, imp.

Hazalenas Butterfly 10123.—Yield of butter, 14 lbs., salted; test made May 22 to 29, 1882; age when made, 8 yrs.; property of Geo. W. Hulick, Batavia, Ohio.

- Hazalenas Butterfly 10123
  - Mr. Guppy 993
    - Brutus Woodford 703, imp.
    - Lady 1775, imp.
  - Hazalena 3275
    - Hyperion 589, imp.
    - Dimple 3248
      - Wallace Barnes 1264, imp.
      - Matchless 723, imp.

Niobe 99.—Yield of butter, 14 lbs. in 7 days; property of Samuel J. Sharpless, Philadelphia, Pa.

Niobe 99, imp.

This old cow, when nearly 18 years of age, was awarded the first prize of the A. J. C. C. at the Centennial Exhibition at Philadelphia as the best Jersey shown.

Gazelle of Mobile 1735.—Yield of butter, 14 lbs. in 7 days; property of W. B. Montgomery, Starkville, Miss.

Gazelle of Mobile 1735, imp.

Nordheim Creamer 9758.—Yield of milk, 196¼ lbs.; yield of butter, 14 lbs., salted; test made Feb. 14 to 21, 1881; age when made, 4 yrs. 1 mo. property of J. W. North, Jr., Augusta, Me.

- Nordheim Creamer 9758
  - Eclipse 1449
    - Sweepstakes 682
      - Tam O'Shanter 381, imp.
      - Susie 959, imp.
    - Amelia 2d 1730
      - Victor Hugo 197, imp.
      - Amelia 484, imp.
  - Hecuba 3155
    - Halifax 681
      - Defiance 196, imp.
      - Hebe 489, imp.
    - Helen 972
      - Sam Weller 271, imp.
      - Hebe 943, imp.

Silene 4307.—Yield of butter, 14 lbs. in 7 days; property of Wm. Simpson, West Farms, N. Y.

- Silene 4307
  - St. Helier 45, imp.
  - Lara 4306
    - Arab 245
      - Nimrod 2d 246
      - Garland 851
    - Effie 523
      - Commodore 56
      - Countess 897

Lily of St. Lambert 5120.—Yield of butter, 14 lbs.; property of T. J. Cooper, Coopersburg, Pa.

- Lily of St. Lambert 5120
  - Laval 506
    - Defiance 196, imp.
    - Lisette 492, imp.
  - Pride of Windsor 483, imp.

Gilt Edge 2d 4420.—Yield of butter, 14 lbs.; property of L. Q. C. Lamar.

- Gilt Edge 2d 4420
  - Nelusko 479
    - Rajah 340, imp.
    - Nelly 55
      - Charleston 1
      - Nannie 4
  - Gilt Edge 2662
    - Yellowskin 871
      - Cliff 176
      - Ariadne 608
    - Gilt 1176
      - Saratoga 135
      - Hebe 2d 1178

Sasco Bell 13601.—Yield of butter, 14 lbs., salted; age when made, 4 yrs.; property of R. G. Skiff, Green's Farms, Conn.

- Sasco Bell 13601
  - Daniel Deronda 2291
    - Thorough Bass 564
      - Tancrid 501, imp.
      - Emblem 90, imp.
    - Gazella 1880
      - Colamore's Atlantic 739, imp.
      - Edy Bashan 1032
  - Lady Louise 4339
    - Gray Coat 1150
      - Yellowskin 871
      - St. Catherine 408, imp.
    - Gold Ear 2200
      - Jove 179
      - Hebe 2d 1178

Vesper 1395.—Yield of butter, 14 lbs. in 7 days; property of G. Dawson Coleman, Brickerville, Pa.

- Vesper 1395, imp.

TABLE II.

TESTS LONGER THAN SEVEN DAYS. THE COWS IN THIS LIST HAVE NO SEVEN-DAY TESTS REPORTED.

Sutliff's Pansy 1019.—Yield of butter, 574 lbs. 8 oz. in a year; property of Asa Bartholomew, Bristol, Conn.

- Sutliff's Pansy 1019
  - Living Storm 173
    - McClellan 25
      - Capt. Darling 535
      - Angelina Baker 13
    - Pansy 8, imp.
  - Dolly 2d 1020
    - Emperor 2d 37
      - Emperor 5
      - Fawn 25
    - Dolly 1021
      - Splendens 16
      - Dot 7

Flora 113, imported.—Yield of butter, 511 lbs. 2 oz., test for 50 weeks; test made May 16, 1853, to April 26, 1854; age when made, 4 yrs.; property of Thos. Motley, Jamaica Plains, Mass.

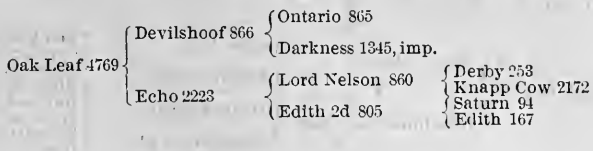
Lady Mel 2d 1795.—Yield of milk, average 18 qts. per day; yield of butter, 183 lbs. in 61 days; test made in 1875, from April 15 to June 15; age when made, 5 yrs.; property of C. P. Chapman, Pike county, Ill.

- Lady Mel 2d 1795
  - Albert 44
    - Jerry 15, imp.
    - Frankie 17, imp.
  - Lady Mel 429
    - McClellan 25
      - Capt. Darling 535
      - Angelina Baker 13
    - Mel 2d 57
      - McClellan 3d 27
      - Mel 37

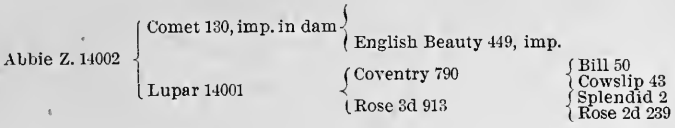
Molly Garfield 12172.—Yield of milk, 1,877¾ lbs. in 62 days; yield of butter, 163 lbs. in 62 days; test made during month of July and Aug., 1882; age when made, 6 yrs. 3 mos.; property of F. S. Peer, E. Palmyra, N. Y.

- Molly Garfield 12172
  - Bel Caliph 1432
    - Belisario 640
      - Pilot Boy 480
      - Flora 1422
    - Calliope 1326
      - John LeBas 398, Noble 71 J.H.B., imp.
      - Caltha 877, imp.
  - Maple Dale 2907
    - Victor 797, imp.
    - Susa 1990, imp.

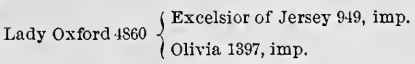
Oak Leaf 4769.—Yield of butter, 63 lbs. 4 oz. in 31 days; property of Jno. D. Wing, Millbrook, N. Y.



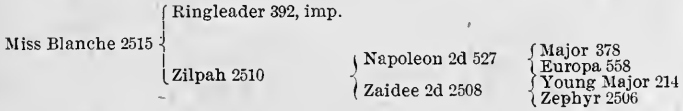
Abbie Z. 14002.—Yield of milk, 1406 lbs.; yield of butter, 61 lbs. 2 oz. in 30 days; test made June, 1876; age when made, 6 yrs. 1 mo.; property of Harvey Newton, Southville, Mass.



Lady Oxford 4860.—Yield of milk, 310 lbs.; yield of butter, 22 lbs. 2 oz. in 10 days; test made Jan., 1878; age when made, 4 yrs.; property of T. C. Murphy, Thayer, Kansas.



Miss Blanche 2515.—Yield of milk, 357 lbs. in 10 days; yield of butter, 20 lbs. 9 oz. in 10 days; test made July 25 to Aug. 3, 1879; age when made, 8 yrs. 3 mos.; property of Z. C. Luse & Son, Iowa City.



Birdie 2611.—Yield of butter, 20 lbs. in 10 days; property of G. Dawson Coleman, Brickerville, Pa.

Lady Josephine 11560.—Yield of butter, 19 lbs. 2 oz. in 8 days; test made June 18 to 25, 1882, 8 days; property of Rev. E. L. Briggs, Wilton Junction, Iowa.

Lady Josephine 11560	Bertram 1883	Scion 1033	Red Knight 666
			Cybele 3d 1270
		Favorita 3198	Mogul 532
			Niobe 2d 514
	Josephine Comet 3306	Touchstone 315	Hartford 52
			Topaz 75
		Josephine 2d 3296	Beacon Comet 675
			Josephine 2737

TABLE

OF

BULLS WITH THREE OR MORE DAUGHTERS

In the Fourteen-Pound List.

Albert 44—Sire Jerry 15, dam Frankie 17. Sire of—

Couch's Lily 3237	16 lbs. 5½ oz.
Fragrance 4059	15 lbs. 3 oz.
Kitty Colt 2213	15 lbs. 9½ oz.
Lady Brown 4th 6911	14 lbs. 12 oz.
Lady Love 2d 2212	16 lbs. 8 oz.

Also sire of Lady Mel 2d; yield, 183 lbs. in 61 days.

Albert has 25 daughters, all over 4 yrs. old.

Aldine 1136—Sire Nelusko 479, dam Gazelle of Mobile 1735 (test 14 lbs.). Sire of—

Bettie Dixon 4527	15 lbs.
Duchess Carolina 3d 6041	15 lbs. 8 oz.
Julia Evelyn 6007	15 lbs. 15½ oz.
Lucky Belle 2d 6037	16 lbs. 14 oz.
Starkville Beauty 4897	14 lbs.

Aldine has 37 daughters over 4 and 3 over 3 yrs. old; total, 40.

Champion of America 1567—Sire May Boy 705, dam Pansy 1019 year's test 574 lbs. 8 oz.). Sire of—

Daisy 12227	15 lbs. ½ oz.
Princess Sheila 7297	16 lbs. 4½ oz.
Silveretta 6852	16 lbs. 9 oz.
Therese M 8364	14 lbs 2 oz.
Tobira 8400	15 lbs. 13 oz.
Webster Pet 4103	14 lbs. 2 oz.

Champion of America has 38 daughters over 4, 29 over 3 and 36 under 3 yrs. old; total, 103.

Columbiad 2d 1515 — Sire Columbiad 534, dam Celestia 1898. Sire of—

Alluring 5541	19 lbs. 5 oz.
Aspirante 9272	14 lbs. 7 oz.
Rose of Rose Lawn 9365	14 lbs. 6 oz.

Columbiad has 11 daughters over 4 and 1 over 3 yrs. old; total, 12.

Gilderoy 2107 — Sire Magnetic 1428, dam Jeanne Le Bas 2476 (test 15 lbs. 8 oz.). Sire of—

Chrome Skin 7881	20 lbs. 10 oz.
Gold Mark 10729	14 lbs. 14 oz.
Sweet Sixteen 10682	14 lbs. 15 oz.
Yellow Locust 10682	14 lbs. 10½ oz.

Gilderoy has 8 daughters over 4, 8 over 3 and 10 under 3 yrs. old; total 26.

Guy Mannering 698 — Sire on Island, dam imp. Brunette Lass 1780 (test 15 lbs. 10 oz.). Sire of—

Cottage Lass 5332	14 lbs. 8 oz.
Fair Lady 6723	19 lbs.
May Fair 5184	16 lbs. 7 oz.
Phlox 16399	16 lbs. 3½ oz.

Guy Mannering has 16 daughters, all over 4 yrs. old.

Iron Bank 1120 — Imported in dam Birdie 2611 (test 20 lbs. in 10 days). Sire of—

Lebanon Daughter 6106	14 lbs. 4 oz.
Lebanon Lass 6108	14 lbs. 2 oz.
Willis 2d 4461	16 lbs. 3 oz.
Vaniah 6597	15 lbs. 9½ oz.

Iron Bank has 17 daughters over 4 yrs. old.

Ike Felch 1292 — Sire Critic 540, dam Maid of Judah 2429. Sire of—

Grace Felch 8291	15 lbs.
Lily of Burr Oaks 11001	15 lbs. 13 oz.
Milkmaid of Burr Oaks 9035	14 lbs. 5 oz.

Ike Felch has 20 daughters over 4 and 3 over 3 yrs. old; total, 23.

Lord Lisgar 1066 — Sire Victor Hugo 197, dam Pauline 494. Sire of—

Clematis of St. Lambert 5478	14 lbs. 3 oz.
Duchess of St. Lambert 5111	15 lbs. 11 oz.
Jollie of St. Lambert 5126	15 lbs. 13½ oz.
Sweet Briar of St. Lambert 5481	14 lbs. 3 oz.

Lord Lisgar has 23 daughters, all over 4 yrs. old.

Lord Lawrence 1414—Sire Lawrence 61, dam Lady Mary 1148. Sire of—

Countess Gasela 9571	15 lbs. 11 oz.
Fall Leaf 8587	14 lbs. 8 oz.
Lady of Bellevue 7705	15 lbs. 11 oz.
Witch Hazel IV 6131	15 lbs. 5½ oz.

Lord Lawrence has 25 daughters over 4, 5 over 3, and 3 under 3 yrs. old; total, 33.

Mercury 432—Sire Jupiter 93, dam Alphea 171 (test 15 lbs. 8 oz.). Sire of—

Iola 4627	15 lbs. 2½ oz.
Lerna 3634	15 lbs. 12 oz.
Nymphaea 5141	15 lbs. 14½ oz.
Phaedra 2561	19 lbs. 13 oz.
Purest 13730	15 lbs. 4 oz.
Zalma 5778	15 lbs. 5 oz.

Mercury has 23 daughters over 4, 3 over 3 and 32 under 3 yrs. old; total, 58.

Oxoli 1922—Sire St. Helier 45, dam Pyrola 4566. Sire of—

Bintana 9837	14 lbs. 3½ oz.
Renini 9181	14 lbs. 10½ oz.
Silenta 17685	15 lbs. 10 oz.
Volie 19465	18 lbs. 1 oz.

Pertinatti 713—Sire Pilot Jr. 141, dam Pert 110. Sire of

Pixie 4115	14 lbs.
Romp Ogden 2d 4761	15 lbs. 5 oz.
Renalba 4117	17 lbs. 4½ oz.

Sire also of the unregistered cow Beauty, test 20 lbs. 15 oz.

Prince of Warren 1512—Sire Southampton 117, dam Gold Drop 222. Sire of—

Dot of Bear Lake 6170	19 lbs. 4 oz.
Ida of Bear Lake 6169	16 lbs.
Mary of Bear Lake 6171	14 lbs.

Pierrot 2d 1669—Sire Pierrot 636, dam Dainty 796. Sire of—

Julia Walker 10133	15 lbs. 12 oz.
New London Gipsey 11667	14 lbs. 8 oz.
Palestina 4644	15 lbs. 8 oz.
Queen Fanny 10275	14 lbs. 2 oz.
Rosy Kate 10276	14 lbs. 4 oz.

Pierrot 2d has 19 daughters over 4 yrs. old.

Ralph 957 — Sire St. Helier 45, dam Ibi 671. Sire of—

Cenie Wallace 2d 6557	15 lbs. 4½ oz.
Florry Keep 6556	14 lbs. 14 oz.
Mhoon Lady 6560	17 lbs. 3 oz.

Rex 1330 — Sire Colt Jr. 825, dam Couch's Lily 3237; test, 16 lbs. 5½ oz. Sire of—

Arawana Queen 5368	16 lbs. 9 oz.
Jeannie Platt	14 lbs. 4 oz.
Louvie 3d 6159	14 lbs. 13 oz.
Princess Bellworth 6801	15 lbs. 10½ oz.

Rex has 30 daughters over 4, 13 over 3 and 33 under 3 yrs. old; total, 76.

Remarkable F. S. 229 J. H. B. — Sire Orange Peel 2d 36 P. S., dam Young Rose 43 P. S. Sire of—

Caroline 12019	14 lbs. 8 oz.
Mary Jane of Belle Vue 6956	17 lbs. 7 oz.
Rosa of Belle Vue 6954	18 lbs. 7½ oz.

Remarkable has 4 daughters over 4 yrs. old.

Rioter 670 (Imported) — Sire of—

Duchess of Bloomfield 3653	20 lbs. ½ oz.
Lady Bloomfield 4704	14 lbs. 12½ oz.
Su Lu 4705	17 lbs. 15 oz.

Rioter has 12 daughters over 4 yrs. old.

St. Helier 45 — Imported. Sire of—

Chroma 4572	20 lbs. 6 oz.
Ianthe 4562	16 lbs. 10 oz.
Meines 3d 7741	20 lbs. 1 oz.
Pavon 12485	14 lbs. 8 oz.
Safrano 4568	14 lbs. 2½ oz.
Silene 4307	14 lbs.
Oxalis 2d 15631	15 lbs.

St. Helier has 37 daughters over 4 and 2 over 3 yrs. old; total, 39.

Signal 1170 — Sire Marius 760, dam Pansy Morris 2060. Sire of—

Aldarine 5301	15 lbs. 1½ oz.
Belle of Patterson 5664	16 lbs. 6 oz.
Croton Maid 5305	21 lbs. 11½ oz.
Edwina 6713	15 lbs. 13 oz.
Fanny Taylor 6714	15 lbs. 12 oz.
Oenone 8614	15 lbs. 14 oz.
Tenella 6712	22 lbs. 1½ oz.
Valhalla 5300	16 lbs.

Signal has 14 daughters over 4 yrs. old.

Stoke Pogis III 2238—Sire Stoke Pogis 1259, dam Marjoram 3239; test, 16 lbs. Sire of—

Cupid of Lee Farm 5997	14 lbs.	6	oz.
Dianna of St. Lambert 6636	16 lbs.	8	oz.
La Belle Petite 5472	15 lbs.	8	oz.
Maggie of St. Lambert 9776	16 lbs.	3	oz.
Mary Anne of St. Lambert 9770	27 lbs.	9¼	oz.
Minnette of St. Lambert 9774	17 lbs.	4	oz.
Moth of St. Lambert 9775	16 lbs.		
Nancy of St. Lambert 12964	14 lbs.	5	oz.
Nora of St. Lambert 12962	14 lbs.	7	oz.

Stoke Pogis III has 27 daughters over 4 and 6 over 3 yrs. old; total, 33.

The Hub 1009—Sire Motley 515, dam Bessie 139. Sire of—

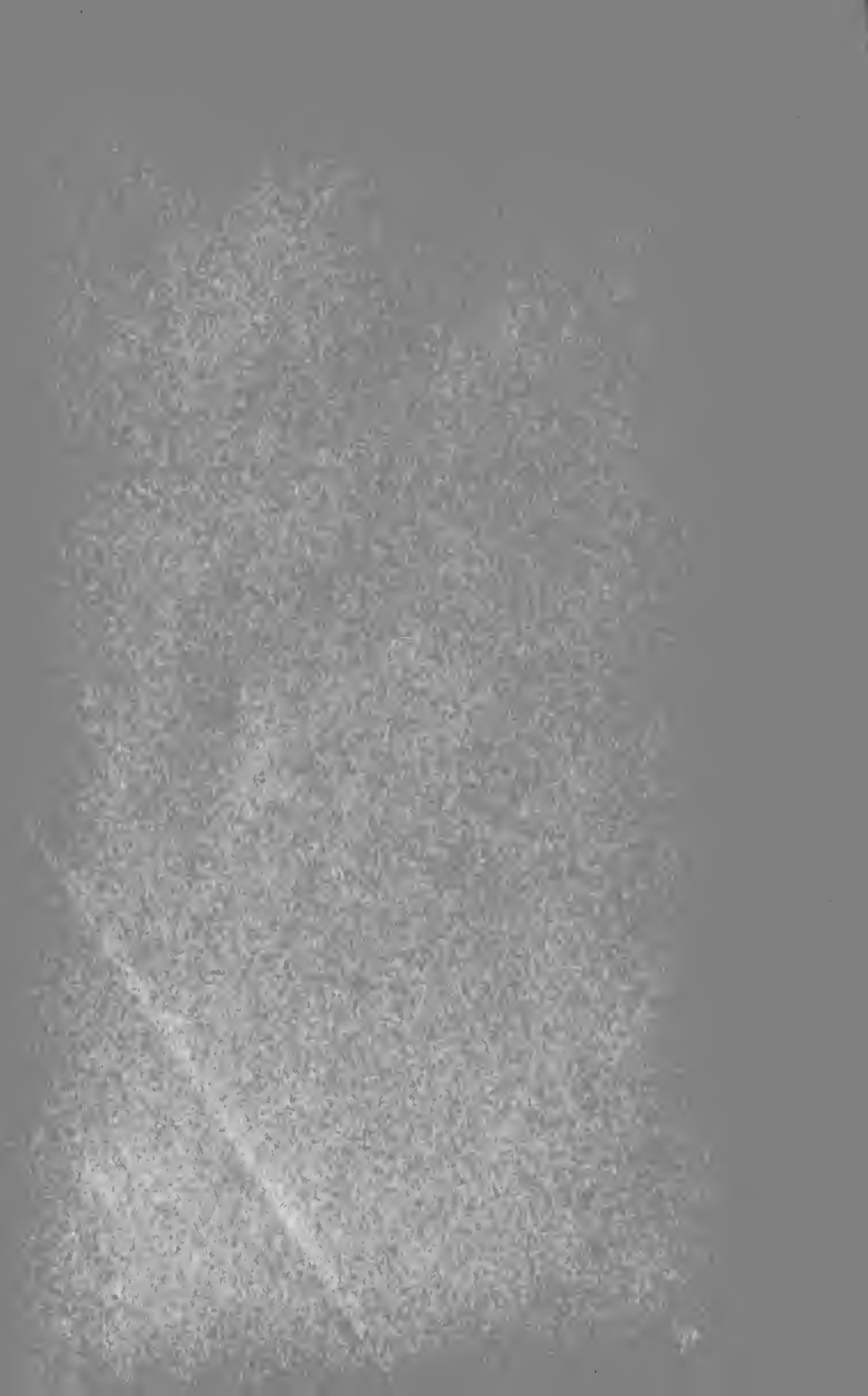
Adora 18569	14 lbs.	3	oz.
Mink 2d 3890	19 lbs.	11	oz.
Mink 3d 4868	14 lbs.	9	oz.
Oktibbelia Duchess 4422	17 lbs.	4	oz.

The Hub has 12 daughters over 4 yrs. old.

Top Sawyer 1404—Sire Marius 760, dam Emblem 90. Sire of—

Busy Bee 6336	16 lbs.	4	oz.
Denise 8281	14 lbs.	4½	oz.
Litza 6338	14 lbs.	3	oz.
Opaline 7590	14 lbs.	10	oz.
Romp Ogden III 5458	14 lbs.	1	oz.
Vixen 7591	17 lbs.	6	oz.

Top Sawyer has 34 daughters over 4, 3 over 3 and 10 under 3 yrs. old; total, 47.



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OF

COWS WITH TWO OR MORE DAUGHTERS

In the Fourteen-Pound List.

Alda 3873 — Sire Grand Duke Alexis 1040, dam Archie 1112 (test 15 lbs.). Dam of —

Tenella 6712	22 lbs.	1½ oz.
Aldarine 5301	15 lbs.	1½ oz.

Angela 1682 — Sire Roxbury 247, dam Europa 121 (test 14 lbs. 2 oz.). Dam of —

Duchess of Bloomfield 3653	20 lbs.	½ oz.
Su Lu 4705	17 lbs.	15 oz.

Azelda 3872 — Sire Grand Duke Alexis 1040, dam Grand Duchess of St. Peters 2733. Dam of —

Gold Trinket 9518	16 lbs.	2 oz.
Belle of Patterson 5664	16 lbs.	6 oz.
Azelda 2d 7022	15 lbs.	2 oz.
Valhalla 5300	16 lbs.	

Cenie Wallace 2663 — Sire Jove Jr. 870, dam St. Mary 409. Dam of —

Bettie Dixon 4527	15 lbs.	
Cenie Wallace 2d 6557	15 lbs.	4½ oz.

Creampot 460 — Imported. Dam of —

Jersey Cream 4161	14 lbs.	12 oz.
Creamer 2467	14 lbs.	1 oz.

Elveta 2121 — Sire Neptune 842, dam Alice Gray 2d 1188. Dam of—

Rosaline of Glenmore 3179 ..... 17 lbs. 10 oz.
Embla 4799 ..... 17 lbs. 8 oz.

Europa 176 — Sire Jupiter 93, dam Alphea 171 (test 15 lbs. 8 oz.). Dam of —

Torfrida 3596 ..... 17 lbs. 6½ oz.
Eurotas 2454 ..... 22 lbs. 7 oz.

Fanny Landseer 1969 — Sire Landseer 331, dam Sylph 615. Dam of—

Julia Walker 10183 ..... 15 lbs. 12 oz.
Queen Fanny 10275 ..... 14 lbs. 2 oz.

Grace Darling 2d 304 — Sire on Island, dam Grace Darling. Dam of—

Grace Davy 8292 ..... 14 lbs. 2 oz.
Grace Felch 8291 ..... 15 lbs.

Grace Darlington 5574 — Sire on Island, dam Violet of Darlington 5573. Dam of —

Nellie Darlington 5956 ..... 15 lbs. 3 oz.
Nazli 10327 ..... 15 lbs. 3½ oz.

Gussie Richards 1673 — Sire Admiral 372, dam Lady Richards 1017. Dam of—

Lerna 3634 ..... 15 lbs. 12 oz.
Iola 4627 ..... 15 lbs. 2½ oz.

Jersey Belle of Scituate 7828 — Sire Victor 3550, dam Jennie 7827 (test 25 lbs. 3 oz.). Dam of—

Belle of Scituate 7977 ..... 16 lbs.
Lass of Scituate 9555 ..... 15 lbs. 14 oz.

Julia 3893 — Sire Sir Charles 131, dam Mary Lowndes 273. Dam of—

Countess of Warren 3896 ..... 14 lbs.
Monmouth Duchess 3895 ..... 14 lbs. 7 oz.

Juliette of St. Lambert 5483—Sire Buffer 2055, dam Rosette of St. Lambert 5108. Dam of—

Judith Coleman 11399	17 lbs. 5 oz.
Aleph Judea 11389	15 lbs. 1¾ oz.

Kalmia 4561—Sire St. Helier 45, dam Ibi 671. Dam of—

Safrano 4568	14 lbs. 2½ oz.
Bintana 9837	14 lbs. 3½ oz.

Lady Gray of Hilltop 6850—Sire Wethersfield 966, dam Bess Lena 3349 (test 18 lbs. 12. oz.) Dam of—

Lady Gray of Hilltop 2d 14641	14 lbs. 12 oz.
Lady Gray of Hilltop 3d 14642	14 lbs. 2 oz.

Lucky Belle 2214—Sire Albert 44, dam Pansy Morris 2060. Dam of—

Lucky Belle 2d 6037	16 lbs. 14 oz.
Oktibeha Duchess 4422	17 lbs. 4 oz.
Maggie May 3255	14 lbs. 2½ oz.

Metah 1295—Sire St. Malo 486, dam Myrtle 1294. Dam of—

Metah's Queen 4886	17 lbs. 9 oz.
Bryant 4193	14 lbs. 8 oz.

Mink 2548—Sire Magnet 968, dam Maggie Micawber 2547. Dam of—

Mink 2d 3890	19 lbs. 11 oz.
Mink 3d 4868	14 lbs. 9 oz.

Mink 2d 3890—Sire The Hub 1009, dam Mink 2548 (test 19 lbs. 11 oz.). Dam of—

Mhoon Lady 6560	17 lbs. 3 oz.
Julia Evelyn 6007	15 lbs. 15½ oz.

Mostar 6971—Sire Clifton Dell 1117, dam Linda 3d 2219 (test 16 lbs. 8 oz.). Dam of—

Princess Mostar 9700	17 lbs. 3 oz.
Lilian Mostar 10364	14 lbs. 3 oz.
El Mora Mostar 15955	14 lbs.

Oonan 1485—Sire Rajah 340, dam Omoo 1247 (test 22 lbs. 2½ oz.). Dam of—

Callie Nan 7959 ..... 16 lbs. 2 oz.
Roonan 5133 ..... 18 lbs. 2 oz.

Pride of Windsor 483—Imp. Dam of—

Duchess of St. Lambert 5111 ..... 15 lbs. 11 oz.
Lily of St. Lambert 5120 ..... 14 lbs.

Regina 32 J. H. B.—Sire Old Noble, dam Mignonne. Dam of—

Regina 2d 2475 ..... 14 lbs. 8 oz.
Regina 4th 12732 ..... 17 lbs. 13½ oz.

Regina 2d 2475—Sire Noble 104 F. S., dam Regina 32 F. S. (test 14 lbs. 8 oz.). Dam of—

Chrome Skin 7881 ..... 20 lbs. 10 oz.
Walkyrie 5708 ..... 14 lbs. 1 oz.

Romp Ogden 1571—Sire Don 611, dam Romp 1098. Dam of—

Romp Ogden 2d 4764 ..... 15 lbs. 5 oz.
Romp Ogden 3d 5458 ..... 14 lbs. 1 oz.

Roxana 2d 2532—Sire Mack 722, dam Roxana 1761. Dam of—

Litza 6338 ..... 14 lbs. 3 oz.
Pixie 4115 ..... 14 lbs.

Sukey 2d 1224—Sire John Bull 358, dam Sukey 1223. Dam of—

Phyllis of Hillcrest 9067 ..... 14 lbs. 12 oz.
Maid of Amboy 2929 ..... 16 lbs. 1 oz.

Sunny South 6830—Sire Proxy 1714, dam Effie of Staatsburg 3194. Dam of—

Fall Leaf 8587 ..... 14 lbs. 8 oz.
Adora 18564 ..... 14 lbs. 3 oz.

TESTS OF UNREGISTERED JERSEYS.

While engaged in collecting the materials for this book, we were informed of some remarkable tests of unregistered cows. While their performances cannot, except in a very few cases, be valuable to the breeder as indicating valuable strains of blood, they very much strengthen the evidence in favor of the productive capacity of the breed. The more remarkable of these tests are thrown into something like tabulated shape below:

NAOMIE, tested by Davis E. Heston, Alabama, N. Y.
Yield in 7 days..... 23 lbs. 6 oz.

EFFIE 885 J. H. B.,
Yield in 7 days..... 22 lbs. 10 oz.

BEAUTY, tested by Geo. W. Campbell, Carter's Creek, Tenn.
Yield in 7 days..... 20 lbs. 15 oz.

GILT EDGE, tested by Davis E. Heston, Alabama, N. Y.
Yield in 7 days..... 20 lbs.

JERSEY QUEEN OF BARNET, tested by J. L. Kenerson, Barnet, Vt.
Yield in 7 days..... 19 lbs. 4 oz.

DOLLY,
Yield in 7 days..... 18 lbs. 11 oz.

In addition to the above tests of a week, we have ABBIE,
Yield in 365 days..... 486 lbs.

QUEEN VICTORIA,
Yield in 30 days..... 80 lbs.

JERSEY ROSALIE 1215 J. H. B.,
Yield in 10 days..... 25 lbs. 3 oz.

Moreover, JERSEY QUEEN OF BARNET was the first cow to beat 800 lbs. in a year, with a yield of 851 lbs. 1 oz., not yet surpassed, except by Mary Anne of St. Lambert; and EFFIE gave in 30 days 98 lbs., and in 236 days 507 lbs. 8 oz.

Of the above, JERSEY QUEEN is by "Duke out of Kate" (Mr. Darling's catalogue). Mr. J. H. Walker identifies Duke with Duke F., by Byron 379 out of Imp. Dazzle 379.

EFFIE contains a good deal of the same blood as Jersey Belle of Scituate.

BEAUTY is by Pertinatti 713, and her dam is also by Pertinatti.

We are unable to trace any connection of the others with registered animals.

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